

**AREA STUDY FOR
ASBESTOS-CONTAINING MATERIAL
AND ORGANIC AND INORGANIC
SOIL CONTAMINATION**

HUNTERS POINT NAVAL SHIPYARD (DISESTABLISHED)
SAN FRANCISCO, CALIFORNIA

VOLUME I: REPORT

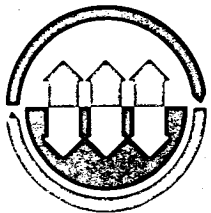
Prepared for
NAVAL FACILITIES ENGINEERING COMMAND
WESTERN DIVISION

July 2, 1987



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Project 365-02.03



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Consultants in Wastes
Management and
Environmental Control

July 2, 1987
Project 365-02.03

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Attention: Code 1142A (G. Brown)

Re: Area Study, Hunters
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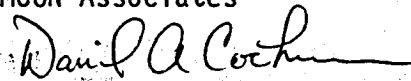
Gentlemen:

We have completed the Area Study for Asbestos - Containing Material and Organic and Inorganic Soil Contamination at Hunters Point Naval Shipyard (Disestablished) and are submitting this report summarizing our findings and recommendations. The work was performed under Contract N62474-85-C-5501.

If you have any questions concerning the information presented in this report, please give us a call.

Very truly yours,

EMCON Associates

for 
Russell J. Scharlin, P.E.
Executive Manager

RJS:srk

AREA SURVEY FOR
ASBESTOS-CONTAINING MATERIAL
AND ORGANIC AND INORGANIC
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EXECUTIVE SUMMARY

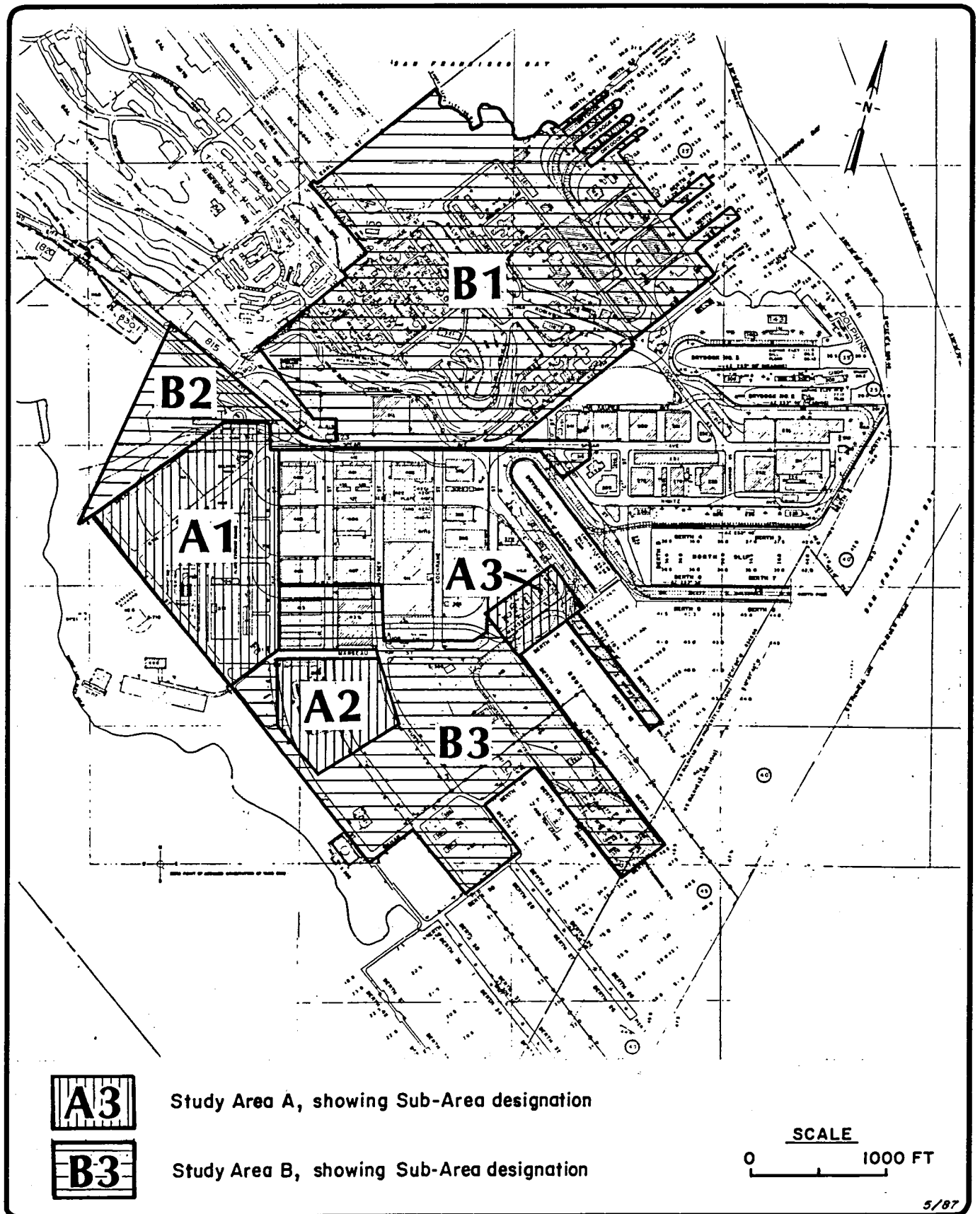
An investigation was conducted by EMCON Associates at Hunters Point Naval Shipyard (HPNS) to identify possible areas having asbestos-containing materials and other materials specified by the Western Division Naval Facilities Engineering Command (WESTDIV) at locations of future construction at HPNS. The results of EMCON's field and laboratory investigation at HPNS are presented in this report.

This investigation is considered preliminary in nature; the purpose is to identify areas where hazardous materials may be located. To allow for a preliminary evaluation of the data, State of California regulatory criteria for hazardous wastes and the protection of ground water are compared with the data obtained in this study. These criteria are presented in Table 1.

SCOPE OF WORK

This investigation consisted of surface sampling for asbestos-containing materials, shallow subsurface exploration using exploratory borings, soil sampling, and laboratory analyses. The goal of these investigations was to verify the existence or nonexistence of asbestos-containing materials and other hazardous waste contamination at the two study areas. While the history of HPNS has included periods of commercial as well as military industrial use, this investigation did not attempt to differentiate between the two possible sources of contamination.

The two sites investigated were Study Area A and Study Area B, each divided into three subareas, as designated by WESTDIV (see Figure 1). A total of 103 5-foot-deep exploratory soil borings was drilled and sampled at HPNS, 59 borings in Study Area A and 44 borings in Study Area B. The locations of the soil borings in Study Areas A and B are shown on Drawings 1 and 2, respectively. In addition, surface samples of suspected asbestos-containing materials were obtained.



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STUDY AREA LOCATION MAP

FIGURE

I

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Soil samples were analyzed for asbestos-containing materials. Composite soil samples were analyzed for semivolatile organic compounds according to U.S. Environmental Protection Agency (EPA) Method 8270, as well as chromium, copper, lead, nickel, and zinc. Selected discrete soil samples were analyzed for volatile organic compounds according to EPA Method 8240. Sample selection was to be random unless there were visual indications of possible contamination.

Surface Sampling for Asbestos-Containing Materials

Galson Technical Services conducted a site walk-through covering Study Areas A and B and the Industrial Landfill in order to sample and analyze suspected asbestos-containing materials (see Appendix D for a detailed discussion). Of the 47 samples analyzed, 35 samples contained measurable or trace quantities of asbestos. The asbestos was generally identified in areas of building demolition, scrap metal processing, waste landfiling (the Industrial Landfill), and insulation of shipboard equipment. Asbestos was typically identified as pipe lagging, transite shingles, tank insulation, and general debris.

Study Area A Borings

Low levels of semivolatile aliphatic hydrocarbons, such as hexadecane, eicosane, and octacosane, and polyaromatic hydrocarbons (PAHs), such as naphthalene, phenanthrene, fluoroethene, and benzo(a)pyrene, were distributed throughout Study Area A in no apparent pattern or trend. Samples from Boring AD4-26 contained the highest levels of semivolatile organic compounds in Study Area A. Phthalates were detected at low levels. Low concentrations of phthalates were common in Subarea A1, but phthalates were generally rare in Subareas A2 and A3. There was no discernible pattern of distribution for these compounds. Samples from Boring AE4-12 contained levels of PCBs which exceed regulatory criteria (the boring was drilled adjacent to an abandoned transformer pad).

Soil samples containing levels of lead and nickel which exceeded regulatory criteria were common in Study Area A. Levels of copper and zinc exceeding regulatory criteria were also detected, but at only four locations for copper and one for zinc. The majority of the samples with levels exceeding the regulatory criteria were found in Subarea A1. Composite soil samples at several sample locations in Subarea A1 contained concentrations of metals that have the potential for exceeding regulatory criteria when the sampling bias (i.e., possible dilution due to compositing) is taken into consideration. In addition, the concentrations of metals in samples from several sample locations throughout the study area were high enough to have a potential for leaching into ground water at levels which could exceed applicable regulatory criteria.

Soil samples from Study Area A contained levels of natural and man-made asbestos in excess of regulatory criteria in 30 of 61 soil samples tested. Twenty-eight of these samples showed naturally occurring asbestos generally in the form of chrysotile found in the serpentinite bedrock fill which has been placed throughout the shipyard for site grading. The sample from Boring AD4-5 contained man-made asbestos in excess of 50 to 60 percent chrysotile. This was by far the highest concentration found in either Study Area A or B. Seven samples displayed a range of 1 to 10 percent asbestos, one at 10 to 20 percent, and 14 samples revealed trace amounts. However, because of sample bias (if the certified industrial hygienist observed suspected asbestos-containing material, that soil portion would be tested), the reported concentrations may not be representative of the average soil conditions.

Study Area B Borings

Soil samples from Subarea B1 revealed low levels of semivolatile aliphatic hydrocarbons and PAHs detected randomly throughout. Aliphatic hydrocarbons and PAHs were also detected in Subarea B3 but were less common. Very low levels of phthalates were detected in half of the samples from Study Area B. Distribution of phthalates appeared to be without pattern or trend.

Levels of chromium were not detected above regulatory criteria in Subarea B1 of Study Area B. Levels of nickel and zinc in composite samples from several sample locations in Subarea B1 have the potential for exceeding regulatory criteria when sample bias is taken into consideration. Additionally, the concentration of metals in samples from several sample locations in Subareas B1 and B3 were high enough to have a potential to leach into the ground water at levels which could exceed applicable regulatory criteria. Samples from Subarea B2 were tested only for asbestos.

Natural and man-made asbestos was detected at levels above the regulatory criteria in 19 of the 45 soil samples collected in Study Area B, with the majority of the positive findings, 14 of the 19, occurring in Subarea B1. Five of the samples contained man-made asbestos, while the remaining 14 samples contained naturally occurring asbestos in the bedrock fill. The asbestos content most commonly encountered was 1 to 10 percent, with 11 samples at 1 to 5 percent asbestos, seven samples at 1 to 10 percent asbestos, and one sample at 5 to 15 percent asbestos. Trace amounts of asbestos were found in five samples. Again, sample bias may result in data not being representative of average soil conditions. Boring BB3-1 showed the highest asbestos concentration at 5 to 15 percent.

CONCLUSIONS

Asbestos and other regulated hazardous waste compounds were detected in varying concentrations at both of the study areas. None of the test results indicated the presence of an acute, immediate hazard to human health at the ground surface. However, the asbestos-containing materials identified on the ground surface (see Appendix D) should be removed and disposed of at a facility permitted to receive and dispose of waste asbestos. Natural and man-made asbestos were encountered below the ground surface. Recommendations for worker safety during removal and excavation of these materials are presented in Appendix D.

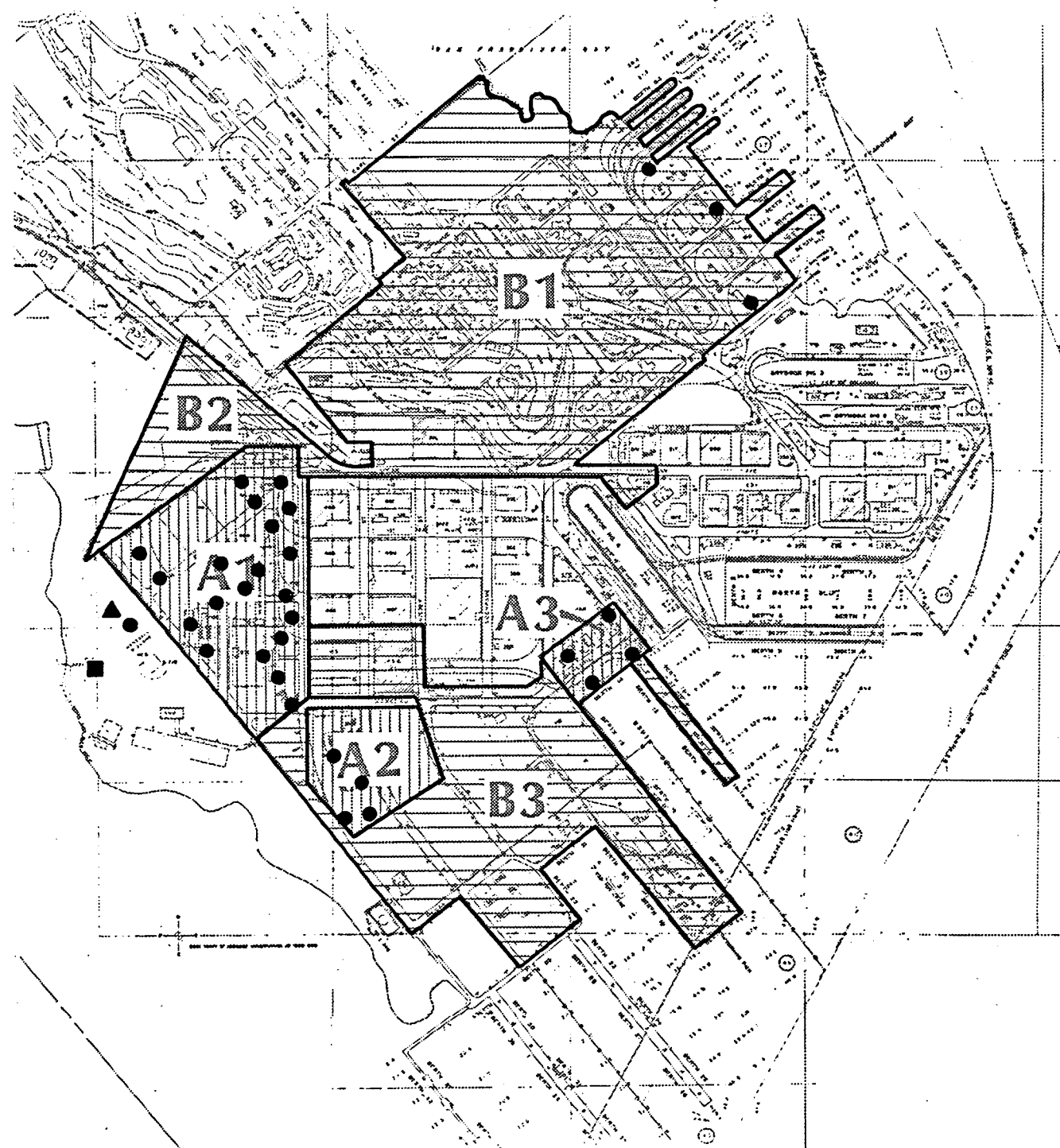
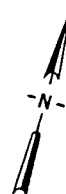
Types of organic and other inorganic contamination detected at the various study sites included volatile organic compounds (e.g., solvents), semivolatile organic compounds (e.g., polyaromatic hydrocarbons from oily wastes and PCBs), and heavy metals (e.g., lead, copper, chromium, nickel, and zinc).

Volatile organic compounds were not found in significant concentrations in either of the study areas. Semivolatile organic compounds were generally not found in any pattern throughout Study Areas A and B, although most of the positive findings in Study Area A occurred in Area AD4 (see Drawing 1 for locations). Boring AD4-26 contained relatively high concentrations of semivolatile organic compounds, and Boring AE4-12 contained levels of PCBs exceeding regulatory criteria (the boring was drilled adjacent to an abandoned transformer pad). Levels of metals exceeding regulatory criteria were encountered in both study areas, but with no apparent pattern or trend. In addition, the concentrations of metals at several sample locations were high enough to have a potential for leaching into ground water at levels which could exceed regulatory criteria.

A list of the borings containing compounds at levels which actually exceed regulatory criteria is presented in Table 2. The areas where these compounds exceeded regulatory criteria are shown on Figure 2.

It is recommended that the areal and vertical extent of the semivolatile organic compounds be further investigated in the vicinity of Boring AD4-26 and the areal and vertical extent of PCBs and metals be studied in the vicinity of Boring AE4-12.

In addition, where concentrations of compounds exceeded or have the potential to exceed the regulatory criteria, or are high enough to leach into ground water at levels which could exceed regulatory criteria, it is recommended that additional sampling be conducted, discrete samples tested, and the results assessed. Prior to construction at any of the



EXPLANATION



Study Area A, showing Sub-Area designation



Study Area B, showing Sub-Area designation



Sample location where TTL, ten-times STL, and other criteria exceeded for at least one compound



Sample location where ten-times STL and other criteria exceeded for at least one compound



Sample location where ten-times STL exceed for at least one compound



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SCALE: 0 1000 2000 3000 4000 FEET

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MAP OF SAMPLE LOCATIONS WHERE SOIL
CHEMISTRY DATA EXCEEDED REGULATORY CRITERIA

FIGURE

2

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locations, a risk assessment should be performed to determine the need for remedial action and/or public and worker protection.

I. INTRODUCTION

An investigation was conducted by EMCON Associates at Hunters Point Naval Shipyard (HPNS) to identify possible areas having asbestos-containing materials and other organic and inorganic compounds at future construction sites at HPNS. The results of EMCON's field and laboratory investigation at HPNS are presented in this report. The two areas investigated were Study Area A and Study Area B, as designated by the Western Division Naval Facilities Engineering Command (WESTDIV). A vicinity map of these two areas is shown on Figure 1. The purpose of the investigation was to preliminarily identify potential contaminated areas where the public or construction workers could be exposed. Any wastes, if existing, were assumed to be generally distributed below ground randomly over the HPNS site in Study Areas A and B, since no known waste disposal sites have been identified in these areas.

BACKGROUND

Reactivation of HPNS as a Naval facility will require construction of both work- and domestic-related facilities. WESTDIV has designated Study Area A as the most likely area of construction, and a closer boring grid spacing for the investigation of random contamination was warranted. Study Area B was designated as the area where construction might take place, and a wider boring grid spacing was selected. Only areas of artificial fill were investigated. Therefore, much of the HPNS site was excluded where undisturbed bedrock outcrops at the ground surface.

SCOPE OF WORK

Field Investigation and Chemical Analyses

On August 8, 1986, WESTDIV submitted a request for a site assessment for asbestos-containing materials to EMCON. The scope of work included collecting suspected asbestos-containing materials observed on the ground

surface and to a depth of 5 feet below the ground surface (the maximum depth of excavation anticipated for typical construction activities).

On August 25, 1986, in accordance with the Navy's proposed scope of work, EMCON submitted a scope of services to conduct a site assessment for asbestos-containing materials at HPNS. On October 29, 1986, the scope of work was expanded to include testing for additional priority pollutant parameters in Study Areas A and B.

The field investigation at HPNS was performed in two study areas, A and B, which were divided into a uniform square grid pattern to locate randomly spaced exploratory soil borings. Surface samples of suspected asbestos-containing materials were collected by a certified industrial hygienist during a site walk-through of Study Areas A and B. Surface sample locations are discussed in Appendix D.

In Study Area A, 5-foot-deep soil borings were drilled on a grid pattern on 200-foot centers, and in Study Area B, 5-foot-deep soil borings were drilled on a grid pattern of 400-foot centers (see Figure 1). A total of 103 soil borings were drilled and sampled, 59 borings in Study Area A and 44 borings in Study Area B. In some cases, alternative boring locations were necessary due to utility lines, buildings, restricted areas, and other obstructions. Actual soil boring locations in Study Areas A and B are shown on Drawings 1 and 2, respectively.

All borings in Study Areas A and B were sampled and analyzed for asbestos-containing material. From each of the soil borings in Study Area A and selected borings in Study Area B designated by WESTDIV, discrete soil samples were collected, preserved, and stored for possible future analysis. Vertical composite samples were also collected from these borings and analyzed for semivolatile organic compounds (SOCs) according to EPA Method 8270, as well as chromium, copper, lead, nickel, and zinc. From each of 20 selected soil borings collected in Study Area A and portions of Study Area B designated by WESTDIV, a discrete soil

sample was collected and analyzed for volatile organic compounds (VOCs) according to EPA Method 8240.

Comparison With Regulatory Criteria

This investigation is considered preliminary in nature; the purpose is to identify areas where hazardous materials may be located. To allow for a preliminary evaluation of the data, the Department of Health Services (DHS) regulatory thresholds for hazardous wastes were used for comparisons. According to the DHS, a waste material is considered to be a regulated hazardous waste if it contains specific compounds at levels which exceed their Total Threshold Limit Concentrations (TTLCs) for solid material or their Soluble Threshold Limit Concentrations (STLCs) for liquid material, as defined in Title 22 of the California Administrative Code.

The TTLC value is to be used for comparison with the total concentration detected in a solid waste sample. The STLC value is to be used for comparison with either ground-water analyses or values determined by a special laboratory procedure called the waste extraction test (WET) procedure. This test measures the potential of selected waste constituents to be leached from a solid matrix. In general, if the total concentration of such a waste component exceeds the STLC by a factor of 10 (see Appendix A for the rationale of using this criterion), (1) it is possible that its soluble portion exceeds the STLC for that compound, and thus, (2) a WET would be required by DHS regulations. Where TTLC and STLC values were not established, concentrations were compared with action levels proposed by the Central Valley Regional Water Quality Control Board (CVRWQCB; Marshack, 1985).

The most widely accepted regulatory threshold values for the identification of hazardous wastes are those used by the DHS; these threshold values are contained in Title 22 of the California Administrative Code. Again, these are not completely applicable to soil contamination, but are being used for a preliminary level of comparison in place of a

formal risk assessment. Values for the evaluation of soil, the total and soluble threshold limits, are presented in Table 1. However, there were many compounds identified at the site for which no DHS regulatory criteria exist. In these cases, we present for comparison the levels proposed by the CVRWQCB as designated levels for the protection of marine environments (see Table 1). These values were chosen because of the site's proximity to the bay and because these values tend to be rather conservative due to the fact that they reflect the sensitive nature of marine environments. In the absence of these values, the closely related values to protect ground water for human consumption are presented.

Finally, the CVRWQCB values for the PAHs presented for the protection of marine and ground water were judged to be overly conservative. Instead, the values rigorously derived by the DHS as action levels for drinking water were converted to the equivalent of designated levels to protect ground water using the criteria outlined by the CVRWQCB (Marshack, 1985).

The regulatory criteria were used in the following manner.

1. Where discrete samples were tested (asbestos, VOCs, and one SOC analysis), the results were compared directly to the regulatory criteria given in Table 1.
2. Where composite samples, prepared from three separate samples, were tested (most of the SOCs and all metals), the results were compared as follows:
 - a. For SOCs the data were compared not only directly to the regulatory criteria for the compound, but also to determine if the concentration exceeded one-third of the regulatory value to account for the possible dilution effect of compositing three samples.

- b. For metals the data were compared not only directly to the regulatory TTLC and a value of 10 times the STLC, but also to one-third of each of the above values to account for possible dilution.

It should also be noted that the asbestos results may be conservatively biased since the certified industrial hygienist selected portions of samples for testing where suspected asbestos-containing materials were observed. Therefore, the asbestos concentrations reported may be higher than the average concentration actually located in the subsurface soils.

The results of this study are presented in the following sections of this report. The rationale for using 10 times the STLC as a concentration limit is presented in Appendix A; the sampling, analytical, and safety procedures utilized are presented in Appendix B; the boring logs are contained in Appendix C; the study of asbestos-containing materials performed by Galson Technical Services is contained in Appendix D; and the Certified Analytical Reports for all materials except asbestos are contained in Appendix E.

II. METHODS OF INVESTIGATION

One hundred and three shallow soil borings were drilled and sampled within designated Study Areas A and B at HPNS during November and December 1986 (see Drawings 1 and 2). Fifty-nine borings were drilled in Study Area A, and 44 borings in Study Area B. Boring logs are presented in Appendix C. In addition, 47 samples of suspected asbestos-containing materials were collected at the ground surface. During the field phase of the investigation, a certified industrial hygienist was employed to aid in sample collection. A summary of the field and laboratory investigations performed in this study are presented in Table 3.

EXPLORATORY BORING LOCATIONS AND DESIGNATIONS

Boring sites for soil sampling were first plotted on a grid pattern using the 1 inch = 400 feet scale maps of HPNS. An interval of 200-foot centers of the grid pattern was chosen for Study Area A, and an interval of 400-foot centers was chosen for Study Area B. Next, the boring locations were transferred to the 1 inch = 40 feet scale utility map of HPNS. The locations were evaluated with respect to obstructions such as buildings and underground and overhead utilities. Borings located within the boundaries of current buildings at the site were moved, and borings within close proximity to utilities were relocated on the map. All of the proposed boring locations were inspected during a field reconnaissance by a field geologist. The reconnaissance included (1) staking approved boring locations using a pocket transit and tape measure, (2) inspecting for low areas and surface stains in order to identify possible contamination areas so that borings could be relocated to include these suspect areas, and (3) evaluating the boring locations to determine the need for an underground utility location service due to proximity of underground utilities. Prior to drilling, a utility locator service was contracted to investigate all boring locations suspected of being in close proximity to underground utilities.

The numbering system for the borings consisted first of designating the study area using an "A" or "B." Then the HPNS grid system was utilized to designate the general sampling location, i.e., "E4" indicates the quadrant at the intersection of Row E and Column 4 (see Drawings 1 and 2 for labeling). Finally, the last number of the designation represents the order in which samples were obtained in that quadrant. Therefore, Boring AE4-3 is located in Study Area A, in the quadrant at the intersection of Row E and Column 4 of the HPNS grid system, and is the third sampling location in that quadrant.

DRILLING PROCEDURES

The procedures described herein were followed so that consistent and reproducible methods were used to obtain samples from the borings. The borings were drilled using a drill rig equipped with 5-inch-diameter, continuous-flight, solid-stem auger.

SAMPLING PROCEDURES

Surface samples of suspected asbestos-containing materials were collected using procedures described in Appendix D.

A detailed account of soil sampling procedures can be found in Appendix B. Borings were logged by a qualified geologist using standard logging procedures. Soils were described according to the Unified Soil Classification System. Soil samples were obtained from auger-return cuttings and by using California modified split-spoon samplers filled with stainless steel screens. After sampling was completed at a depth of 4.5 to 5 feet (three split-spoon samples), the hole was backfilled with auger cuttings to 3/4 foot and with cement-bentonite grout to the surface.

The three split-spoon samples were inspected by the certified industrial hygienist for visual identification of asbestos fibers. If fibers were observed, a sample was taken for analysis. If no observable fibers were

noted, a single composite sample was prepared in the field from the three samples for asbestos analysis.

For borings where SOC's and metals were to be analyzed, a composite sample was prepared in the laboratory from the three samples.

ANALYTICAL PROCEDURES

Chemical and mineralogical analyses of soil samples were conducted according to standard quantitative analytical procedures (see Table 4). Certified analytical reports are contained in Appendix E of this report.

VOCs were extracted by the purge-and-trap technique and analyzed using gas chromatographic mass spectrometry (GC/MS) according to EPA Method 8240. SOC's were extracted with methylene chloride and analyzed by GC/MS according to EPA Method 8270. The total concentrations of metals were determined from soil using a nitric acid digestion and analysis by atomic absorption according to the procedures specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (EPA SW-846, 3rd edition, November 1986).

SITE-SAFETY PLAN

The safety plan used during EMCON's field investigation at HPNS (see Appendix B) consisted of the following:

- Respirator training
- Cartridge selection
- Personnel protection equipment
- Decontamination
- Special precautions

There were no reported injuries or illnesses that resulted from field assignments at HPNS.

III. SITE INVESTIGATIONS

SURFACE SAMPLING FOR ASBESTOS-CONTAINING MATERIALS

A site walk-through was conducted in Study Areas A and B by a certified industrial hygienist experienced in asbestos identification. In addition, at the request of the Navy, the Industrial Landfill, located at the western edge of HPNS, was also inspected for asbestos-containing material. Of the total of 47 samples of suspected asbestos-containing material collected for analysis, 35 of the samples actually contained measurable or trace quantities of asbestos. The asbestos was generally found in areas of building demolition, scrap metal processing, solid waste disposal (the Industrial Landfill), and insulation of shipyard equipment. Asbestos was typically identified as pipe lagging, transite shingles, tank insulation, and general construction debris. The detailed discussion and presentation of the surface sampling results and recommendations are contained in Appendix D.

STUDY AREA A BORINGS

General Site Description

Study Area A, as designated by WESTDIV, is composed of three subareas of varying size, occupying much of the south and southwest sector of HPNS. Subarea A1 is the largest, followed by Subareas A2 and A3 (see Figure 1 and Drawing 1). Subarea A1 is located in the west-central region of HPNS, west of I Street. Subareas A2 and A3 can be found in the south and southeast of HPNS, respectively. Subarea A2 is located between Hussey and I Streets and south of Manseau Street; Subarea A3 is found adjacent to Drydock 4 and bisected by Manseau Street between Morrell and E Streets.

General Geologic and Hydrogeologic Conditions

Regional geologic information indicates that there are two soil units represented in Study Area A: (1) made soils (Ma) composed of artificial fill over Franciscan Formation and serpentinite and (2) made soils (Mc) composed of artificial fill over Bay Mud. In most cases, the nature and scope of this investigation did not allow for confirmation of the regional geologic units represented beneath the artificial fill materials at Study Area A. The thickness of the overlying fill materials varies greatly, but is generally thicker over Bay Mud than over bedrock.

Composition of soil types in the fill materials is divided into two varieties: (1) serpentinite fill composed of crushed bedrock clasts and fines derived from weakly to deeply weathered serpentinite and serpentinitized peridotite and (2) heterogeneous fill composed of weakly to moderately weathered clasts and fines of crushed serpentinitized peridotite, serpentinite, cemented sandstone, chert, basalt, siliceous claystone, and quartz. Serpentinite fill is found only in Subarea A1, while heterogeneous fill is found in all three subareas.

Ground water was not encountered in any of the borings in Study Area A. However, based on previous data from nearby locations, ground water should be encountered between 5 and 10 feet below the surface. Topography suggests that ground-water flow direction varies from southwesterly to southeasterly toward the bay.

General Soil Chemistry

Soil samples from Study Area A were tested for the presence of SOC's, including petroleum-related substances, PAHs, and aliphatic hydrocarbons. Additional tests were performed for VOCs and selected heavy metals (chromium, copper, lead, nickel, and zinc).

The following paragraphs outline general chemical characteristics of the soil from Study Area A.

1. VOCs were detected at low concentrations in 15 of the 21 soil samples analyzed for VOCs from Study Area A. Benzene, toluene, and 1,1,1-trichloroethane (1,1,1-TCA) were the only priority pollutant VOCs detected. There was no discernible pattern of distribution for the VOCs. Of those compounds detected, none exceeded regulatory criteria values.
2. Relatively low levels of petroleum-related products (aliphatic hydrocarbons and PAHs) were detected in Study Area A. No areal pattern was noted in the distribution of these compounds. The highest levels were encountered at Boring AD4-26.
3. Phthalates were detected in soil samples from nearly every location in Study Area A, with the exception of those from Subarea A3, where their occurrence was rare. However, in all cases the levels detected were below established regulatory criteria.
4. PCBs were encountered at only one location, Boring AE4-12, which was drilled adjacent to an abandoned transformer pad.
5. Selected heavy metals were detected in every soil sample location from Study Area A. Copper and lead levels were detected in excess of their respective TTLC values at one location (Boring AE4-12). The level of chromium did not exceed the regulatory criteria in the samples analyzed from Study Area A. The level of copper exceeded one-third the TTLC in one sample, 10 times the STLC in two samples, and one-third of 10 times the STLC in six samples. The level of lead exceeded one-third the TTLC in one sample, 10 times the STLC in 10 samples, and one-third of 10 times the STLC in 20 samples. The level of nickel exceeded one-third the TTLC in 13 samples, 10 times the STLC in 29 samples, and one-third of 10 times the STLC in 10 samples. The level of zinc exceeded one-third the TTLC in one sample and one-third of 10 times the STLC in one sample.

General Subsurface Asbestos Findings

Sixty-two soil samples were collected from the borings and tested for asbestos in Study Area A. Of those tested, almost half (29 of 62) exceeded the DHS regulatory limit of 1 percent and are defined as asbestos materials. Only three of these samples contained man-made asbestos; most of the positive findings were naturally occurring chrysotile and actinolite asbestos in serpentinite from the bedrock and bedrock-derived artificial fill materials. The asbestos materials were most commonly detected at levels between 1 to 10 percent chrysotile. Two samples showed concentrations of asbestos in excess of 20 percent: Boring AD4-5 at 50 to 60 percent chrysotile and Boring AE2-4 at 15 to 25 percent actinolite. However, it should be realized that this concentration may not be representative of the soil in general since suspected asbestos-containing material was segregated for the sample prepared by the certified industrial hygienist. There is no discernible pattern to the positive findings exceeding the regulatory limit of 1 percent. Other fibrous minerals, such as zeolites, were detected but are not classified as asbestos compounds. Subarea A1 displayed the highest proportion of positive findings, with 25 of 41 samples in excess of 1 percent asbestos.

Subarea A1

Geologic Conditions

Thirty-nine borings were drilled and sampled in Subarea A1, including three additional borings in the adjacent Bay Fill Area (see Drawing 1). These borings revealed artificial fill materials to the total depths explored. Heterogeneous fill materials composed approximately two-thirds of the artificial fill encountered with serpentinite fill making up the rest. These fills are composed predominantly of clayey gravels, gravelly clays, and gravelly sand to clayey sand. Gravels are dense to very dense, fine and coarse with 5 to 30 percent low-plasticity interstitial clay. An areal overview of the artificial soil types

reveals a general pattern of predominantly sandy fill in the western side of the area and largely gravel and clay soils to the east.

Soil Chemistry

Thirteen samples from Subarea A1 were analyzed for priority pollutant VOCs (see Table 5). Benzene was detected in one sample at 9 parts per billion (ppb), toluene in four samples at levels up to 14 ppb, and 1,1,1-TCA in two samples at up to 4 ppb. Acetone and 1,1,3-trimethylcyclohexane were the only nonpriority pollutant VOCs detected in Subarea A1. Acetone was identified in four locations at levels ranging from 16 to 59 ppb (see Table 6); 1,1,3-trimethylcyclohexane was detected in one location at 7 ppb. The concentrations of each of the VOCs are considered trace and did not exceed the designated levels to protect ground water for human consumption proposed by the CVRWQCB (see Table 1).

Petroleum-related substances, represented by PAHs and aliphatic hydrocarbons, have no apparent pattern of distribution in this subarea, but have a tendency for higher levels to occur close to I Street (see Tables 7, 8, and 9). The exception to this is Boring AD4-26. Samples from this boring contained the highest levels of PAHs, at 40,700 ppb, in all of the samples analyzed. It was the only location found to contain phenol and methylphenol, which are also petroleum related. Phthalates were detected in 28 of the 39 samples; there was no discernible pattern of distribution for these compounds. Boring AD4-26 contained the highest levels of phthalates. Boring AE4-12, which was drilled adjacent to an abandoned transformer pad, was the only location where PCBs were detected. PCBs were detected at 460.5 parts per million (ppm), well above the TTLC of 50 ppm.

Thirty-nine soil samples from Subarea A1 were analyzed for selected heavy metals; the results of these analyses are presented in Table 10. The level of chromium did not exceed the regulatory criteria in the samples from this subarea. The level of copper exceeded the TTLC in one

sample from the subarea, one-third the TTLC in one sample, 10 times the STLC in one sample, and one-third of 10 times the STLC in five samples. The level of lead exceeded the TTLC in one sample, one-third the TTLC in one sample, 10 times the STLC in seven samples, and one-third of 10 times the STLC in 17 samples. The level of nickel did not exceed the TTLC in samples from this subarea; however, it did exceed one-third the TTLC in 13 samples, 10 times the STLC in 22 samples, and one-third of 10 times the STLC in three samples. The level of zinc exceeded one-third the TTLC in one sample and one-third of 10 times the STLC in one sample.

Asbestos Findings

Forty-one soil samples were collected from borings in Subarea A1 and tested for asbestos content, revealing 25 exceeding the DHS regulatory criteria of 1 percent asbestos. Of these, only two samples contained asbestos of man-made origin. These were Borings AD4-5 and AD4-12 at 50 to 60 percent and 1 to 10 percent asbestos, respectively. Of the samples showing concentrations of naturally occurring asbestos, 10 exhibited 10 to 20 percent asbestos, four had 1 to 10 percent, and 18 revealed 1 to 5 percent asbestos. However, as previously mentioned, in preparing soil samples for testing, the certified industrial hygienist selectively segregated suspected asbestos-containing material for the samples, and therefore, the concentrations determined may not be representative of the average soil conditions at the sample location.

Subarea A2

Geologic Conditions

Fourteen soil borings were drilled and sampled in Subarea A2 revealing heterogeneous artificial fill materials to the total depths explored (see Drawing 1). These are composed of almost equal proportions of sands, gravels, and gravelly clay. The sands are poorly to well graded, fine to coarse, with 5 to 15 percent low-plasticity fines and 5 to

35 percent fine and coarse gravel. Gravels are fine and coarse with a trace to 20 percent low-plasticity fines. Clays are composed of low-plasticity fines with 30 to 50 percent fine to coarse sand and gravel. Subarea A2 is located entirely within the soil classification zone for Mc soils composed of fill on top of Bay Mud. The interlayered fill materials are generally very dense with hard, poorly to moderately weathered clasts of serpentinitized peridotite, cemented sandstone, chert, quartz, and serpentinite. Areal distribution of these soils shows gravelly clays predominant in the southeast section of the area, and gravels and sands to the northwest.

Soil Chemistry

Trace levels of 1,1,1-TCA, toluene, and acetone were detected sporadically in the six samples from Subarea A2 analyzed for VOCs (see Tables 11 and 12).

Phthalates and petroleum-related compounds were present in most of the 14 samples collected in this subarea (see Tables 13, 14, 15, and 16). Phthalates were detected in 12 of the 14 samples at levels ranging from 170 to 4,000 ppb. The levels did not exceed established regulatory criteria. No pattern was noted in the distribution of these levels in the subarea.

PAHs and aliphatic hydrocarbons were present in three and six of the 14 locations, respectively. The levels of both types were relatively low with levels of the aliphatic hydrocarbons generally exceeding those of the PAHs. Boring AE3-4 contained the highest level of the aliphatic hydrocarbons at 23,030 ppb. The compounds 1,3- and 1,4-dichlorobenzene were detected at 93 and 88 ppb, respectively, at Boring AF3-3, well below the regulatory criteria of 130,000 ppb for each compound.

Fourteen soil samples from Subarea A2 were analyzed for selected heavy metals; the results of these analyses are presented in Table 17. Of the 14 samples analyzed, none contained levels in excess of the TTLC or one-

third the TTLC for each of the metals. The levels of chromium, copper, and zinc did not exceed the regulatory criteria in the samples from this subarea. The level of lead, however, exceeded 10 times the STLC in one sample and one-third of 10 times the STLC in three samples. Additionally, the level of nickel exceeded 10 times the STLC in four samples and one-third of 10 times the STLC in seven samples.

Asbestos Findings

Fifteen soil samples were collected from borings in Subarea A2 and tested for asbestos content. None of these contained asbestos of man-made origin. Three of the 15 samples exhibited naturally occurring asbestos: Borings AF3-1 and AE3-5 at 1 to 10 percent and Boring AE2-2 at 1 to 5 percent. Trace amounts of asbestos were detected in four samples, and asbestos was undetected in eight samples.

Subarea A3

Geologic Conditions

Six soil borings were drilled and sampled in Subarea A3, revealing heterogeneous artificial fill materials to the total depths explored (see Drawing 1). Subarea A3 is located entirely within the soil classification zone for Mc soils, composed of artificial fill overlying Bay Mud. The fills are composed predominantly of sandy to clayey gravel with minor amounts of fine sand. The gravels are dense to very dense, fine and coarse with low-plasticity interstitial clay between 5 and 20 percent.

Soil Chemistry

Acetone was the only VOC detected in this subarea, at 50 ppb in Boring AE3-10 (see Tables 18 and 19).

Low levels of semivolatile organic compounds were found at Subarea A3 (see Tables 20 and 21). Aliphatic hydrocarbons were found in each sample from this subarea at levels ranging from 65 to 5,800 ppb. The two highest levels (5,800 and 2,600 ppb) were found closest to E Street (in Borings AD2-1 and AE2-4, respectively). Phthalates were found in four borings (AD2-1, AE3-10, AE2-1, and AE2-4) at levels ranging from 830 to 2,700 ppb. Phenanthrene and fluoranthene were the only compounds detected which exceeded one-third of each of their DHS Applied Action Levels at 1,000 and 1,400 ppb, respectively, in the sample from Boring AD2-1. Dibenzofuran was detected only in the sample from Boring AD2-1 at 67 ppb. Regulatory criteria do not exist for this compound.

Six soil samples from Subarea A3 were analyzed for selected heavy metals; the results of these analyses are presented in Table 22. Of the six samples analyzed, none contained levels exceeding the TTLC or one-third the TTLC for the metals. The levels of chromium and zinc did not exceed the regulatory criteria in the samples from this subarea. The level of copper exceeded 10 times the STLC in one sample and one-third of 10 times the STLC in one sample. The level of lead exceeded 10 times the STLC in two samples. The level of nickel exceeded 10 times the STLC in three samples.

Asbestos Findings

A total of six soil samples were collected from Subarea A3 and tested for asbestos content, with two exceeding the regulatory criteria of 1 percent. Both of these samples consist of naturally occurring chrysotile asbestos, and one, at Boring AE2-4, was in the form of the mineral actinolite. This sample also displayed the highest concentration of asbestos in the subarea at 15 to 25 percent. In the remaining five samples, asbestos was not detected. No pattern of distribution was noted.

STUDY AREA B BORINGS

General Site Description

Study Area B consists of three irregularly shaped subareas of varying size which occupy much of the northern and south-central regions of HPNS (see Figure 1 and Drawing 2). Subareas B1 and B2 are located north of Spear Avenue; Subarea B3 is found south of Manseau Street with the exception of a small rectangular area between Hussey and I Streets and terminating at the northern end of Building 439.

General Geologic Conditions

Three geologic units are represented in Study Area B: (1) made soils (Ma) composed of artificial fill over Franciscan Complex and serpentinite, (2) made soils (Mc) composed of artificial fill over Bay Mud, and (3) bedrock (KJ-sp) composed of Franciscan Complex materials and serpentinite. In some cases, the scope of this investigation did not allow for confirmation of the regional geologic units represented beneath the artificial fill materials at Study Area B. Artificial fill materials are represented by the two varieties: (1) homogeneous serpentinite fill and (2) heterogeneous fill. A description of these two fill types has already been detailed in the general geology section for Study Area A. Franciscan Complex bedrock (KJ-sp) is exposed in the northern region of HPNS, including a large portion of Subarea B1. It is composed of soft to hard, poorly to deeply weathered serpentinitized peridotite, serpentinite, sandstone, shale, chert, basalt, and greenstone. Fill materials and/or topsoil usually comprise only a thin covering, typically less than 1 foot thick.

The geologic units Ma, Mc, and KJ-sp also define geomorphic features at HPNS. Ma areas are distinguished by deep cuts and smooth-shaped fills creating a level terrain. Mc soils are more uneven than Ma terrain, but are still fairly level. KJ-sp soils are distinguished by uplands with moderate to steep slopes. Surficial artificial fill types are distrib-

uted with no apparent pattern. The scope of this investigation did not allow for determination of an accurate overall picture of the distribution of artificial fill types; however, statements about local distribution can be made.

General Soil Chemistry

Soil samples from Study Area B were tested for the presence of SOC's, including petroleum-related substances, such as PAHs and aliphatic hydrocarbons, and selected heavy metals (chromium, copper, lead, nickel, and zinc).

The following paragraphs outline general chemical characteristics of Study Area B.

1. Low levels of petroleum-related products were encountered in Study Area B. PAHs and aliphatic hydrocarbons were common in Subarea B1 but rare in Subarea B3.
2. Phthalates were detected at low levels in the samples from Borings BB2-2, BB2-7, BB2-8, BB2-11, BB3-1, BC2-2, BE3-6, and BF3-9. No pattern was apparent in the distribution of these compounds.
3. The level of chromium did not exceed the regulatory criteria in any of the samples from Study Area B. The level of copper exceeded 10 times the STLC in three samples and one-third of 10 times the STLC in two samples. The level of lead exceeded one-third the TTLC in three samples, 10 times the STLC in two samples, and one-third of 10 times the STLC in one sample. The level of nickel exceeded one-third the TTLC in two samples and 10 times the STLC in three samples. The level of zinc exceeded one-third of 10 times the STLC in three samples.

General Subsurface Asbestos Findings

Forty-five soil samples were collected and tested for asbestos content in Study Area B, revealing 19 samples which exceeded the DHS regulatory limit of 1 percent asbestos. Five of these samples were characterized as man-made asbestos, four of which were collected in Subarea B1. The most common asbestos content range is 1 to 5 percent, detected in 11 of the 19 samples with positive findings exceeding the regulatory criteria. Seven samples contained 1 to 10 percent asbestos, while only one, Boring BB3-1, contained 5 to 15 percent asbestos. Subarea B1 accounts for the largest portion of positive findings, with 14 of the 19 samples exceeding 1 percent asbestos. Asbestos was largely undetected in Subarea B3, while in Subarea B2 two of the four samples showed a range of 1 to 5 percent asbestos.

Subarea B1

Geologic Conditions

Nineteen borings were drilled and sampled in Subarea B1 and revealed artificial fill and bedrock to the total depths explored (see Drawing 2). The artificial fill that was sampled is predominantly composed of heterogeneous fill with minor amounts of serpentinite fill. The three units that occur at HPNS are represented in Subarea B1, with Franciscan Complex rock (KJ-sp) occupying over two-thirds of the sub-area. The heterogeneous fill is composed of gravels, sands, and gravelly clays. The gravels are dense to very dense and fine to coarse with 5 to 30 percent low-plasticity interstitial fines. Sands are fine to coarse with less than 5 to 40 percent low-plasticity fines. Clays are made of low-plasticity fines with 25 to 50 percent fine to coarse sand and gravel. Serpentinite fill is made of gravelly sand generally with less than 5 percent low-plasticity interstitial fines and 35 percent fine and coarse gravel. Bedrock was encountered in nearly half of the borings at depths ranging from the surface to 4-1/2 feet. It is composed of gray serpentinite and serpentinitized peridotite. Heterogeneous

artificial fills predominate in the eastern section of Subarea B1 near the bay. Occurrence of serpentinite fill is in the KJ-sp zone.

Soil Chemistry

Low levels of petroleum-related compounds were detected in Subarea B1 (see Tables 23 and 24). No pattern was noted in the distribution of these compounds. PAHs were detected in four of six of the samples at concentrations ranging from 65 (in Boring BC2-2) to 1,100 ppb (in Boring BB2-11). Naphthalene and fluoranthene were the only PAHs which exceeded one-third of their regulatory criteria at 960 (in Boring BB2-11) and 730 ppb (in Boring BB2-7). Aliphatic hydrocarbons were detected in all of the samples at levels ranging from 100 (in Boring BB2-2) to 3,400 ppb (in Boring BB2-11). The total hydrocarbon concentration in Boring BB2-11 was 16,000 ppb (see Table 25). Phthalates were detected at each location at concentrations ranging from 470 to 3,000 ppb.

The six soil samples from Subarea B1 were analyzed for selected heavy metals; the results of these analyses are presented in Table 26. The level of chromium did not exceed the regulatory criteria in any of the samples from this subarea. The level of copper exceeded 10 times the STLC in one sample. The level of lead exceeded 10 times the STLC in three samples and one-third of 10 times the STLC in two samples. The level of nickel exceeded one-third the TTLC in two samples and 10 times the STLC in three samples. The level of zinc exceeded one-third the TTLC in one sample.

Asbestos Findings

Nineteen soil samples were collected from the borings and tested for asbestos at Subarea B1. These tests revealed that 14 of the samples contained levels of asbestos exceeding regulatory criteria, with six samples at 1 to 5 percent asbestos, seven samples at 1 to 10 percent asbestos, and one sample at 5 to 15 percent asbestos. Man-made asbestos

fibers at concentrations between 1 to 15 percent were detected in soil samples from Borings BB2-7 and BB2-10. Samples from Borings BB2-3 and BB2-11 revealed concentrations of man-made asbestos at 1 to 10 percent. Areal distribution of asbestos detected in the northeast sector of Subarea B1 is largely uniform with most samples showing between 1 to 10 percent asbestos, while there appears to be no pattern of distribution in the remainder of Subarea B1.

Subarea B2

Geologic Conditions

Four exploratory borings were drilled and sampled in Subarea B2, revealing artificial fill to the total depths explored (see Drawing 2). Subarea B2 contains Ma and Mc soils, with both homogeneous and serpentinite artificial fill materials present. Homogeneous and serpentinite artificial fills are composed of gravelly sand, clayey sand, silty sand with minor amounts of sandy gravel, clayey gravel, and gravelly clay. No distribution pattern of fill types occurs in Subarea B2, with serpentinite fill materials found in Borings BD4-1 and BD4-2 and heterogeneous fill at Borings BC4-1 and BC4-2.

Soil Chemistry

No soil chemistry tests were conducted on samples obtained in this subarea.

Asbestos Findings

A total of four soil samples were collected from the borings and tested for asbestos in Subarea B2. The tests revealed two samples in excess of 1 percent asbestos at 1 to 5 percent. The asbestos-bearing samples were found in the southern end of Subarea B2 in Borings BD4-1 and BD4-2. No man-made asbestos was detected. Asbestos was undetected in the remaining two samples.

Subarea B3

Geologic Conditions

Twenty-one borings were drilled and sampled in Subarea B3, revealing artificial fill to the total depths explored (see Drawing 2). Subarea B3 contains Ma and Mc soils, with both homogeneous and serpentinite fill materials represented. The artificial fill is composed predominantly of heterogeneous fill with minor amounts of serpentinite fill. These fills are composed of gravels with minor amounts of sand and gravelly clay. The gravels are fine and coarse with 5 to 30 percent low-plasticity interstitial clay. The sands are mostly fine grained and consist of 5 to 20 percent low-plasticity interstitial clay. Serpentinite fill was encountered in Borings BF3-3 and BF3-7. Artificial fills composed primarily of sand were often encountered in the southern portion of this subarea in proximity to the bay. Marine sediments used as fill materials were found at the southern tip of Subarea B3 in Borings BF3-10 and BG3-1.

Soil Chemistry

Low levels of phthalates (1,100 and 1,800 ppb at Borings BF2-2 and BE3-6, respectively) and petroleum-related compounds were sporadically detected in this subarea (see Tables 27 and 28). PAHs were detected only at Boring BF2-2 at levels up to 80 ppb. Aliphatic hydrocarbons were detected in the sample from Boring BE3-6 at levels ranging from 150 to 250 ppb.

Soil samples from Borings BE3-6, BF2-2, BF3-9, and BG3-1 were analyzed for selected heavy metals; the results of these analyses are presented in Table 29. The levels of chromium, copper, and nickel did not exceed the regulatory criteria in these samples. The level of lead exceeded

one-third of 10 times the STLC in one sample. The level of zinc exceeded one-third of 10 times the STLC in two samples.

Asbestos Findings

Twenty-two soil samples were collected from the borings and tested for asbestos in Subarea B3, revealing three samples in excess of the regulatory criteria of 1 percent asbestos. The sample from Boring BF3-1 showed man-made asbestos at 1 to 5 percent chrysotile. Samples from Boring BE3-4 and BF3-6 showed a range of 1 to 5 percent naturally occurring chrysotile asbestos fibers. In the remaining 19 samples, asbestos was undetected. There was no discernible pattern to the positive findings for Subarea B3.

IV. CONCLUSIONS AND RECOMMENDATIONS

In evaluating analytical data generated during this investigation and in formulating conclusions, it is necessary to put the analytical data into the proper perspective. To put the data into perspective, analytical results were compared with existing and proposed regulatory criteria that have been developed to classify wastes and to establish criteria to protect waters of the State (see Table 1).

In comparing analytical data developed in this study with the various existing and proposed regulatory criteria, it is important to consider any bias that may have been introduced by the sampling methods. For example, in the case of asbestos data for soil samples, the data should be considered to represent a conservative estimate of concentrations of asbestos in the soil. This is because the samples submitted for asbestos analysis were selectively composited by the certified industrial hygienist who specifically selected constituents of interest (e.g., fibrous material and sand). The asbestos results for soils, therefore, should only be used as qualitative data to identify the presence or absence of asbestos.

A potential sampling bias was also introduced into samples that were analyzed for SOCs and metals. Samples submitted for these analyses were composite samples prepared by compositing three depth-discrete samples from a single boring. There is a possibility, therefore, that the concentration of a given parameter at any given depth interval from which the composite was prepared may exceed the concentration in the composite by a factor of three or less. Consequently, SOCs and metals data should be compared with the regulatory criteria and one-third of the regulatory criteria to account for this bias.

In addition to comparing analytical results with the various regulatory criteria, results are also compared with another threshold value. Ten times the STLC is a threshold value used to assess whether the total amount of a given compound in a soil might pose a threat to underlying

ground water. The rationale for using this as a threshold value is based on an analytical feature of the extraction method used to derive the soluble portion of that compound from soils (see Appendix A for a complete discussion). While the concentrations of compounds are measured in the extract of the soil being tested, the extract has been derived by adding water to the soil in a 10 to 1 ratio. Therefore, to evaluate whether a compound has the potential to leach out of a soil into ground water at levels exceeding regulatory criteria, the total concentration of that compound in soil may be compared with 10 times the STLC for that compound. If the total concentration in the soil does not exceed this threshold value (i.e., 10 times the STLC), then the soluble portion cannot exceed the STLC and further testing should not be required. If, on the other hand, the total concentration exceeds this threshold value for a particular compound, the extraction test should be performed to evaluate the potential for leaching of the compound.

A list of the borings containing compounds at levels which actually exceed regulatory criteria is presented in Table 2. The areas where these compounds exceeded regulatory criteria are shown in Figure 2.

With the above considerations in mind, the analytical data may be evaluated in the proper perspective. Asbestos-containing materials were detected both on the ground surface and in the underlying soils at various locations throughout the study areas. The asbestos-containing materials detected on the ground surface contain man-made asbestos and should be removed and disposed of at a facility permitted to receive and dispose of waste asbestos.

Both naturally occurring and man-made asbestos were detected in soils underlying the study areas. Man-made asbestos, in concentrations exceeding regulatory criteria, was detected in soils from seven sample borings (AD4-5, AE4-12, BB2-3, BB2-7, BB2-10, BB2-11, and BF3-1). Naturally occurring asbestos, in concentrations exceeding regulatory criteria, was detected in soils at 27 sample locations in Study Area A and 14 sample locations in Study Area B. Although the distribution of natu-

rally occurring asbestos is more extensive than man-made asbestos in the soil samples, the available literature does not clearly show any significant health risk associated with the handling of soil containing serpentine minerals (i.e., naturally occurring asbestos) as found at HPNS and in geologic formations of the San Francisco Bay Area (see Appendix D).

Because the potential health effects from inhaling soil particles while handling soil rich in serpentine minerals is not well understood and because of the localized occurrence of man-made asbestos in site soils, prudence dictates that a program of dust suppression supplemented with personal protective equipment should be implemented for all excavation work. Additionally, the safety procedures described in Appendix D should be followed while handling asbestos-containing materials or working in and around excavations to minimize potential health risks associated with asbestos.

The results of VOC and SOC testing, with a few exceptions, generally indicate sporadic and independently occurring low-level contamination. VOC analyses were performed on discrete samples, and therefore, the data can be compared directly with regulatory criteria. This comparison indicates that the concentration of VOCs in the samples tested does not exceed available regulatory criteria. Consequently, further testing for VOCs should not be necessary.

Composite samples were analyzed for SOCs, and the data were compared with applicable regulatory criteria both before and after accounting for the sampling bias previously discussed. The results of this comparison indicate that regulatory criteria for at least one SOC were exceeded in samples from two locations: Borings AD4-26 and AE4-12. In addition, the comparison indicates a potential for exceeding regulatory criteria for an SOC in samples from two locations: Borings BB2-7 and BB2-8. The vertical and areal extent of SOCs in the vicinity of Borings AD4-26 and AE4-12 should be determined. The concentration of SOCs in discrete

soil samples from Borings BB2-7 and BB2-8 should be determined to evaluate whether or not the concentrations exceed regulatory criteria.

Composite samples were analyzed for copper, chromium, lead, nickel, and zinc. The data were compared with applicable regulatory criteria both before and after accounting for the sampling bias discussed previously. In addition, the data were compared with other appropriate threshold values (i.e., 10 times the appropriate STLC) to evaluate the potential for leaching from the soil to ground water in levels which may exceed regulatory criteria.

The concentrations of these metals in soil samples was variable from subarea to subarea within Study Area A. In Subarea A1, the concentrations of copper, lead, nickel, and zinc in soil samples from at least one sample location exceed and/or have the potential to exceed regulatory criteria. In Subarea A2, the concentrations of lead and nickel in soil samples from at least one sample location were high enough to have a potential for leaching into ground water at levels which could exceed regulatory criteria. Similarly, the concentrations of copper, lead, and nickel in soil samples from at least one sample location in Subarea A3 were high enough to have a potential for leaching into the ground water at levels which could exceed regulatory criteria.

Within Study Area B, the concentration of metals in soil samples also appears to be variable from subarea to subarea. In Subarea B1, the concentrations of nickel and zinc in soil samples have the potential to exceed regulatory criteria at one or more sample locations. Additionally, the concentrations of copper, nickel, and lead in soil samples from more than one sample location are high enough to have a potential to leach into the ground water at levels which could exceed regulatory criteria. Soil samples from Subarea B2 were only analyzed for asbestos, and therefore, no metal data are available for Subarea B2. The concentrations of lead and nickel in soil samples from more than one sample location in Subarea B3 are high enough to have a potential to leach into

the ground water at concentrations which could exceed regulatory criteria.

Due to the variability in the concentration of the various metals, the sampling bias, and the need to consider both regulatory criteria and other threshold values, the following general recommendations are considered appropriate. For sample locations where regulatory criteria are exceeded or there is a potential for exceeding the criteria, additional work should be undertaken to further characterize the contamination and potential health risks. The scope of work should include, but not necessarily be limited to, (1) collecting discrete soil samples to be analyzed for the total concentration of specific metals, (2) performing a waste extraction test on selected samples, and (3) performing a risk assessment. For sample locations where there is a potential to leach metals into the ground water at levels which could exceed regulatory criteria, the scope of additional work should include items 1 and 2 from the scope of work described above and, depending on the results, item 3.

Table 1
REGULATORY THRESHOLDS

Compounds	RWQCB Levels To Protect Marine Waters ¹		RWQCB Levels To Protect Ground Water ²		DHS Hazardous Criteria ³		Other	
	Soil (ug/kg)	Water (ug/l)	Soil (ug/kg)	Water (ug/l)	Soil TTLT (mg/kg)	Water STLC (mg/l)	Soil (ug/kg)	Water (ug/l)
<u>Volatile Organic Compounds</u>								
Benzene	--	--	700,000	70,000	--	--	--	--
1,1,1-Trichloroethane	--	--	200,000	20,000	--	--	NA	NA
Toluene	5,000,000	500,000	NA	NA	--	--	NA	NA
<u>Semivolatile Organic Compounds</u>								
Acenaphthene	710,000	71,000	NA	NA	--	--	NA	NA
Acenaphthylene	--	--	--	--	--	--	--	--
Anthracene	--	--	NA	NA	--	--	1,900 ⁴	190 ⁴
Benzo(a)anthracene	--	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	2.8	0.28	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	--	--	4,200,000	420,000	--	--	NA	NA
Butylbenzylphthalate	--	--	--	--	--	--	3,000 ⁵	300 ⁵
Chrysene	--	--	2.8	0.28	--	--	--	--
Dibenz(a,h)anthracene	--	--	2.8	0.28	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	129,000	13,000	NA	NA	--	--	NA	NA
1,4-Dichlorobenzene	129,000	13,000	NA	NA	--	--	NA	NA
Di-n-butylphthalate	--	--	770,000	77,000	--	--	NA	NA
Di-n-octylphthalate	--	--	--	--	--	--	3,000 ⁵	300 ⁵
Fluorene	--	--	NA	NA	--	--	1,900 ⁴	190 ⁴
Fluoranthene	NA	NA	NA	NA	--	--	1,900 ⁴	190 ⁴
Indeno(1,2,3-cd)pyrene	--	--	NA	NA	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Methylphenol	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	1,800 ⁴	180 ⁴
Phenanthrene	--	--	NA	NA	--	--	1,900 ⁴	190 ⁴
Phenol	30,000	3,000	NA	NA	--	--	NA	NA
Polychlorinated biphenyls	NA	NA	NA	NA	50	5	NA	NA

Table 1
REGULATORY THRESHOLDS
(Continued)

Compounds	RWQCB Levels To Protect Marine Waters ¹		RWQCB Levels To Protect Ground Water ²		DHS Hazardous Criteria ³		Other	
	Soil (ug/kg)	Water (ug/l)	Soil (ug/kg)	Water (ug/l)	Soil TTL (mg/kg)	Water STLC (mg/l)	Soil (ug/kg)	Water (ug/l)
Pyrene	--	--	2.8	0.28	--	--	1,900 ⁴	190 ⁴
Total petroleum hydrocarbons	--	--	--	--	--	--	100,000	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	129,000 ⁵	12,900 ⁵
<u>Inorganic Compounds</u>								
Asbestos	--	--	--	--	1 percent	--	--	--
Chromium, total	NA	NA	NA	NA	2,500	500	NA	NA
Copper	NA	NA	NA	NA	2,500	25	NA	NA
Lead	NA	NA	NA	NA	1,000	5	NA	NA
Nickel	NA	NA	NA	NA	2,000	20	NA	NA
Zinc	NA	NA	NA	NA	5,000	250	NA	NA

1. Thresholds are based on designated levels to protect marine waters, proposed by the Central Valley Regional Water Quality Control Board.
2. Designated levels to protect ground water for human consumption, proposed by the Central Valley Regional Water Quality Control Board.
3. Soil: Total Threshold Limit Concentration (TTL), Department of Health Services, Title 22, Section 66699, California Administrative Code.
Water: Soluble Threshold Limit Concentration (STLC), Department of Health Services, Title 22, Section 66699, California Administrative Code.
4. Using Department of Health Services Applied Action Levels for human consumption in a liquid and applying guidelines in the reference cited below, a value to protect ground water for human consumption was derived (Waste Classification and Clean-up Level Determination, J.B. Marshack, Central Valley Regional Water Quality Control Board, November 21, 1985).

NA = Not Applicable

-- = Not Available

Table 2

BORINGS CONTAINING COMPOUNDS WHICH EXCEED REGULATORY CRITERIA

Boring Number	Compounds Exceeding Regulatory Criteria		
	TTL	10 Times the STL	Other
AD4-1		lead, nickel	
AD4-5		copper, lead, nickel	
AD4-9		nickel	
AD4-12		nickel	
AD4-13		lead, nickel	
AD4-14		nickel	
AD4-15		nickel	
AD4-16		nickel	
AD4-17		lead, nickel	
AD4-18		nickel	
AD4-19		nickel	
AD4-20		nickel	
AD4-21		nickel	
AD4-22		nickel	
AD4-24		nickel	
AD4-25		nickel	
AD4-26		lead	phenanthrene, fluoranthene, pyrene
AD4-27		lead	
AE4-1		nickel	
AE4-4		nickel	
AE4-5		nickel	
AE4-7		lead, nickel	

Table 2

BORINGS CONTAINING COMPOUNDS WHICH EXCEED REGULATORY CRITERIA
(Continued)

Boring Number	Compounds Exceeding Regulatory Criteria		
	TTLc	10 Times the STLC	Other
AE4-10		nickel	
AE4-12	copper, lead	nickel	hexachlorobiphenyls, heptachlorobiphenyls, octachlorobiphenyls
AE3-2		nickel	
AE3-5		nickel	
AF3-1		lead, nickel	
AF3-2		nickel	
AD2-1		copper, lead	
AE3-10		nickel	
AE2-2		lead, nickel	
AE2-4		nickel	
BB2-2		nickel	
BB2-7		lead, nickel	
BB2-11		copper, lead	

Table 3

SUMMARY OF FIELD AND LABORATORY INVESTIGATIONS

Site Name	Number of Borings	Number of Analyses	Analysis Performed
<u>Study Area A</u>	59	--	--
Subarea A1	39	41 14 39 39 5	Asbestos VOCs SOCs Metals (chromium, copper, lead, nickel, and zinc) Total hydrocarbons
Subarea A2	14	15 5 14 14 1	Asbestos VOCs SOCs Metals Total hydrocarbons
Subarea A3	6	6 2 6 6	Asbestos VOCs SOCs Metals
<u>Study Area B</u>	44	--	--
Subarea B1	19	19 6 6 1	Asbestos SOCs Metals Total hydrocarbons
Subarea B2	4	4	Asbestos
Subarea B3	21	23 4 4	Asbestos SOCs Metals

Table 4

ANALYTICAL PROCEDURES FOR SOIL SAMPLES

Parameter	Method Number	Reference
Metals	7000 Series with 3050 Digestion	1
Volatile organic compounds	8240	1
Semivolatile organic compounds	8270	1
Asbestos	--	2

References:

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA SW-846, 1982.
2. Asbestos analysis conducted by polarized light microscopy.

Table 5

VOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A1

Compounds*	Borings												
	AD4-1	AD4-4	AD4-10	AD4-17	AD4-19	AD4-22	AD4-23	AD4-24	AD4-26	AD4-27	AE4-3	AE4-9	AE4-12
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	4
Benzene	ND	ND	ND	ND	ND	ND	9	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	4	ND	14	2	ND	ND	ND	3	ND

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 6

VOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A1

Compounds*	Borings												
	AD4-1	AD4-4	AD4-10	AD4-17	AD4-19	AD4-22	AD4-23	AD4-24	AD4-26	AD4-27	AE4-3	AE4-9	AE4-12
Acetone	ND	ND	ND	ND	22	ND	59	ND	ND	ND	16	ND	32
1,1,3-Trimethylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	ND
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 7

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1

Compounds*	Borings														
	AC4-1	AD4-1	AD4-2	AD4-3	AD4-4	AD4-5	AD4-6	AD4-7	AD4-8	AD4-9	AD4-10	AD4-11	AD4-12	AD4-13	AD4-13**
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	89	ND	ND	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	120	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	72	ND	ND	ND	470	ND	ND	ND	79	ND	ND	94	130	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D1-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	110	ND	ND	ND	500	ND	ND	ND	ND	ND	ND	88	350	ND
Pyrene	ND	150	ND	ND	ND	500	ND	ND	ND	ND	ND	ND	120	390	ND
Butylbenzylphthalate	ND	ND	ND	260	260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	ND	87	ND	ND	ND	330	ND	ND	ND	ND	ND	ND	ND	280	ND
Bis(2-ethylhexyl)phthalate	670	400	ND	4,000	1,000	300	ND	1,000	ND	2,000	670	470	1,100	420	ND

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

[illegible]

Table 7

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

Compounds*	Borings												
	AD4-14	AD4-15	AD4-16	AD4-17	AD4-18	AD4-19	AD4-20	AD4-21	AD4-22	AD4-23	AD4-24	AD4-25	AD4-26
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	85
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	400
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	350
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	530
Phenanthrene	ND	ND	ND	ND	ND	ND	79	ND	ND	ND	ND	ND	3,600 ¹
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	600
Di-n-butylphthalate	ND	ND	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	84	ND	ND	ND	120	ND	ND	ND	ND	5,500 ¹
Pyrene	ND	ND	ND	120	ND	ND	ND	100	ND	ND	ND	ND	5,300 ¹
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	230	300
Benz(a)anthracene	ND	ND	ND	82	ND	ND	ND	ND	ND	ND	ND	ND	2,900
Bis(2-ethylhexyl)phthalate	1,000	2,800	1,700	2,300	2,500	330	800	ND	1,000	ND	ND	1,000	11,000

—

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

[illegible]

Table 7

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
 COMPOSITE SOIL SAMPLES
 STUDY AREA A - SUBAREA A1
 (Continued)

Compounds*	Borings											
	AD4-27	AE4-1	AE4-2	AE4-3	AE4-4	AE4-5	AE4-6	AE4-7	AE4-8	AE4-9	AE4-10	AE4-12
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	290	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	330	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D1-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	430	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	280	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	5,000	730	ND	ND	6,300	4,700	ND	1,500	ND	1,600	6,700	ND

Table 7

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

Compounds*	Borings											
	AD4-27	AE4-1	AE4-2	AE4-3	AE4-4	AE4-5	AE4-6	AE4-7	AE4-8	AE4-9	AE4-10	AE4-12
Chrysene	560	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	520	ND	ND	ND	ND	ND	ND	120	ND	ND	ND	ND
Benzo(k)fluoranthene	290	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobiphenyls	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	263,000 ²
Heptachlorobiphenyls	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	137,000 ²
Octachlorobiphenyls	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60,500 ²

* All concentrations are reported in parts per billion (ppb).

** Discrete soil samples at 0-0.5' depth where oil was noted at ground surface.

ND = Not Detected

1. Exceeds the derived threshold value.
2. Exceeds the TTLC.

Table 8

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1

Compounds*	Borings														
	AC4-1	AD4-1	AD4-2	AD4-3	AD4-4	AD4-5	AD4-6	AD4-7	AD4-8	AD4-9	AD4-10	AD4-11	AD4-12	AD4-13	AD4-13**
Hexadecane	ND	90	ND	ND	ND	7,600	ND	ND	ND	420	ND	ND	ND	ND	ND
Chlorotris(2-methylpropyl)-stannane	ND	260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6,10,14-Tetramethylheptadecane	ND	80	ND	ND	ND	8,900	ND	ND	180	460	100	ND	ND	100	ND
Nonedecane	ND	80	ND	ND	ND	7,600	ND	ND	ND	290	ND	ND	ND	ND	ND
Heneicosane	ND	80	ND	ND	ND	6,000	ND	ND	120	240	ND	ND	ND	ND	ND
Tetracosane	ND	190	ND	ND	ND	3,700	ND	ND	ND	ND	ND	ND	ND	ND	1,100
Hexacosane	ND	220	ND	ND	ND	ND	ND	ND	ND	130	210	ND	ND	700	900
Octacosane	ND	260	ND	ND	ND	ND	ND	ND	ND	ND	200	ND	ND	ND	1,500
Pentadecane	ND	ND	ND	ND	ND	6,800	ND	ND	ND	300	ND	ND	94	ND	ND
2,6,10-Trimethylhexadecane	ND	ND	ND	ND	ND	6,900	ND	ND	ND	ND	ND	ND	ND	ND	ND
Octadecane	ND	ND	ND	ND	ND	9,400	ND	ND	170	360	ND	ND	ND	ND	ND
Eicosane	ND	ND	ND	ND	ND	7,600	ND	ND	ND	260	ND	ND	88	ND	ND
Docosane	ND	ND	ND	ND	ND	5,100	ND	ND	ND	180	ND	ND	120	200	ND
Pentacosane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190	ND	ND	ND	1,800
Heptacosane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	250	ND	ND	500	1,400
Nonacosane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	170	470	1,100	ND	1,100

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
STUDY AREA A - SUBAREA A1
COMPOSITE SOIL SAMPLES
(Continued)

[illegible]

Table 8

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

Compounds*	Borings												
	AD4-14	AD4-15	AD4-16	AD4-17	AD4-18	AD4-19	AD4-20	AD4-21	AD4-22	AD4-23	AD4-24	AD4-25	AD4-26
Hexadecane	ND	ND	ND	ND	ND	ND	ND	ND	270	ND	ND	ND	ND
Chlorotris(2-methylpropyl)-stannane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,300
2,6,10,14-Tetramethylheptadecane	ND	ND	ND	ND	360	ND	120	ND	450	90	ND	ND	ND
Nonadecane	ND	ND	ND	ND	240	ND	110	ND	190	60	ND	ND	ND
Heneicosane	ND	ND	ND	250	300	ND	150	ND	270	60	ND	ND	ND
Tetracosane	ND	ND	ND	450	200	180	ND	ND	ND	ND	ND	ND	ND
Hexacosane	ND	ND	ND	820	ND	230	160	ND	ND	ND	ND	ND	ND
Octacosane	ND	ND	ND	850	ND	210	ND	ND	ND	ND	ND	ND	1,100
Pentadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6,10-Trimethylhexadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Octadecane	ND	ND	ND	ND	300	ND	110	ND	230	60	ND	ND	ND
Eicosane	ND	ND	ND	ND	240	ND	130	ND	160	60	ND	ND	ND
Docosane	ND	ND	ND	270	200	ND	130	ND	90	ND	ND	ND	ND
Pentacosane	ND	ND	ND	660	ND	230	150	ND	ND	ND	ND	ND	ND
Heptacosane	ND	ND	ND	850	ND	190	ND	ND	ND	ND	ND	ND	ND
Nonacosane	ND	ND	ND	670	ND	200	ND	ND	ND	ND	ND	ND	990

Table 8

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
 COMPOSITE SOIL SAMPLES
 STUDY AREA A - SUBAREA A1
 (Continued)

Compounds*	Borings												
	AD4-14	AD4-15	AD4-16	AD4-17	AD4-18	AD4-19	AD4-20	AD4-21	AD4-22	AD4-23	AD4-24	AD4-25	AD4-26
1,2,3-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,300
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	550
Undecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	850
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,300
Hexadecanoic acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	930
Nonadecanoic acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	670
Benzo[j]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	570
2,2-Oxybisethanol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ah-Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1:2,1:Terphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1:3,1:Terphenyl	ND	ND	ND	380	ND	ND	ND	ND	ND	ND	ND	ND	ND
Terphenyl	ND	ND	ND	440	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz[e]acephenanthrylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptadecane	ND	ND	ND	ND	280	ND	ND	ND	200	ND	ND	ND	ND

Table 8

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
 COMPOSITE SOIL SAMPLES
 STUDY AREA A - SUBAREA A1
 (Continued)

Compounds*	Borings											
	AD4-27	AE4-1	AE4-2	AE4-3	AE4-4	AE4-5	AE4-6	AE4-7	AE4-8	AE4-9	AE4-10	AD4-12
Hexadecane	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	170	ND
Chlorotris(2-methylpropyl)-stannane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6,10,14-Tetramethylheptadecane	ND	ND	ND	ND	180	ND	ND	ND	270	590	230	ND
Nonadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heneicosane	150	ND	ND	ND	ND	450	ND	390	130	1,800	250	ND
Tetracosane	ND	ND	ND	ND	ND	700	ND	1,600	ND	7,200	220	ND
Hexacosane	ND	ND	ND	ND	130	840	ND	2,700	ND	9,000	300	ND
Octacosane	280	ND	ND	ND	110	790	ND	2,300	ND	6,700	ND	ND
Pentadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6,10-Trimethylhexadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Octadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Eicosane	ND	ND	ND	ND	ND	ND	ND	ND	ND	710	ND	ND
Docosane	ND	ND	ND	ND	ND	590	ND	970	ND	5,300	ND	ND
Pentacosane	280	ND	ND	ND	130	750	ND	2,300	ND	8,500	200	ND
Heptacosane	390	ND	ND	ND	110	770	ND	2,500	ND	9,000	ND	ND
Nonacosane	ND	ND	ND	ND	ND	600	ND	1,600	ND	6,100	ND	ND

Table 8

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
 COMPOSITE SOIL SAMPLES
 STUDY AREA A - SUBAREA A1
 (Continued)

Compounds*	Borings											
	AD4-27	AE4-1	AE4-2	AE4-3	AE4-4	AE4-5	AE4-6	AE4-7	AE4-8	AE4-9	AE4-10	AE4-12
1,2,3-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Undecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexadecanoic acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonadecanoic acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[j]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Oxybisethanol	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ah-Carbazole	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,1:Terphenyl	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,3,1:Terphenyl	1,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Terphenyl	2,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz[e]acephenanthrylene	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptadecane	ND	ND	ND	ND	ND	ND	ND	ND	140	ND	ND	ND

* All concentrations are reported in parts per billion.

** Discrete soil sample from 0 to 0.5 feet

ND = Not Detected

Table 9
SEMIVOLATILE ORGANIC COMPOUNDS
COMPOSITE AND DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A1

Compounds*	Borings				
	AD4-26 (Composite)	AD4-27 (Composite)	AE4-12 (Composite)	AE4-10 (2.5-3')	AD4-13 (1-1.5')
Total hydrocarbons	200	890	190	66	1,300

* All concentrations are reported in parts per billion (ppb).

Table 10
METALS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1

Compounds*	Borings													
	AC4-1	AD4-1	AD4-2	AD4-3	AD4-4	AD4-5	AD4-6	AD4-7	AD4-8	AD4-9	AD4-10	AD4-11	AD4-12	AD4-13
Chromium, total	350	130	330	400	170	170	160	73	280	170	380	290	150	170
Copper, total	170 ¹	1,000 ²	24	13	22	250 ³	17	42	34	65	25	9.6	56	68
Lead, total	770 ²	82 ³	15	14	15	95 ³	15	15	21 ¹	22 ¹	19 ¹	15	43 ¹	55 ³
Nickel, total	73 ¹	240 ³	1,100 ²	1,100 ²	1,000 ²	550 ³	1,000 ²	160 ¹	1,100 ²	520 ³	830 ²	1,200 ²	390 ³	400 ³
Zinc, total	110	370	33	22	25	190	21	56	33	58	41	13	110	98

Table 10
METALS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

Compounds*	Borings													
	AD4-14	AD4-15	AD4-16	AD4-17	AD4-18	AD4-19	AD4-20	AD4-21	AD4-22	AD4-23	AD4-24	AD4-25	AD4-26	AD4-27
Chromium, total	160	300	200	150	97	110	180	150	150	490	200	170	48	74
Copper, total	53	31	24	170 ¹	68	39	65	30	48	22	39	39	2,300 ²	98 ¹
Lead, total	42 ¹	18	15	66 ³	22 ¹	16	31 ¹	18 ¹	17 ¹	22 ¹	14	12	210 ³	72 ³
Nickel, total	300 ³	530 ³	590 ³	480 ³	260 ³	260 ³	610 ³	560 ³	280 ³	980 ²	430 ³	390 ³	33	160 ¹
Zinc, total	110	47	36	270	65	46	82	39	53	31	46	46	1,200 ¹	170

Table 10
METALS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A1
(Continued)

Compounds*	Borings										
	AE4-1	AE4-2	AE4-3	AE4-4	AE4-5	AE4-6	AE4-7	AE4-8	AE4-9	AE4-10	AE4-12
Chromium, total	160	300	240	120	130	440	170	440	360	110	140
Copper, total	41	6.6	6.4	33	90	12	200 ¹	26	120 ¹	40	4,000 ²
Lead, total	13	14	18 ¹	15	45 ¹	20 ¹	84 ³	19 ¹	51 ¹	36 ¹	4,700 ²
Nickel, total	470 ³	1,300 ⁴	1,300 ⁴	320 ³	200 ³	1,400 ⁴	450 ³	1,200 ⁴	980 ⁴	330 ³	510 ³
Zinc, total	36	15	13	38	160	19	140	30	61	53	3,800 ¹

* All concentrations are reported in parts per million (ppm).

1. Exceeds one-third of 10 times the STLC.
2. Exceeds the TTLC.
3. Exceeds 10 times the STLC.
4. Exceeds one-third of the TTLC.

Table 11

VOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

Compounds*	Borings					
	AE3-4 (2-2.5')	AE3-5 (2.5-3')	AE3-9 (2.5-3')	AE3-10 (2-2.5')	AE4-11 (2.5-3')	AF3-1 (2.5-3')
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	7
Toluene	ND	3	ND	ND	ND	ND

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 12

VOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

Compounds*	Borings					
	AE3-4 (2-2.5')	AE3-5 (2.5-3')	AE3-9 (2.5-3')	AE3-10 (2-2.5')	AE4-11 (2.5-3')	AF3-1 (2.5-3')
Acetone	20	ND	ND	50	ND	ND

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 13

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

Compounds*	Borings													
	AE4-11	AE3-1	AE3-2	AE3-3	AE3-4	AE3-5	AE3-6	AE3-7	AE3-8	AE3-9	AF4-1	AF3-1	AF3-2	AF3-3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	93
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	88
Di-n-butylphthalate	ND	ND	170	ND	ND	ND	260	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	190	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	180	ND	ND	ND	ND	ND	ND	95
Bis(2-ethylhexyl)phthalate	1,400	1,200	530	1,300	ND	600	230	600	1,700	4,000	ND	1,500	2,700	2,400
Chrysene	ND	ND	ND	ND	ND	ND	81	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	68	ND	120	ND	ND	ND	ND	ND	ND	100
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	91
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	74
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

[illegible]

Table 14

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS

COMPOSITE SOIL SAMPLES

STUDY AREA A - SUBAREA A2

(Continued)

Compounds*	Borings													
	AE4-11	AE3-1	AE3-2	AE3-3	AE3-4	AE3-5	AE3-6	AE3-7	AE3-8	AE3-9	AF4-1	AF3-1	AF3-2	AF3-3
4,11-Dimethyltetradecane	ND	ND	ND	ND	2,500	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentadecane	ND	ND	ND	ND	3,000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexadecane	ND	ND	ND	ND	720	ND	ND	ND	ND	120	ND	ND	ND	ND
Heptadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	ND	ND	ND	ND
2,6,10,14-Tetramethylheptadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	180	ND	ND	ND	ND
Octadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	ND	ND	ND	ND
Nonadecane	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	ND	ND	ND	ND
Eicosane	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	ND	ND	ND
Octacosane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210	ND
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	370
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	340
4-Nonylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270
Unknown	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190
4-Tetramethylbutylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	220

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 15

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

Compounds*	<u>Boring</u> AF3-1 (2.5-3')
Trimethylsilanol	18

* All concentrations are reported in parts per billion (ppb).

Table 16

TOTAL HYDROCARBONS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

Compounds*	<u>Boring</u> AE3-9
Total hydrocarbons	280

* All concentrations are reported in parts per billion (ppb).

Table 17
METALS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A2

Compounds*	Borings													
	AE4-11	AE3-1	AE3-2	AE3-3	AE3-4	AE3-5	AE3-6	AE3-7	AE3-8	AE3-9	AF4-1	AF3-1	AF3-2	AF3-3
Chromium, total	78	100	89	25	50	87	27	100	94	76	25	100	130	46
Copper, total	43	21	31	23	18	34	33	56	25	27	51	42	28	31
Lead, total	27 ¹	18 ¹	10	7.3	14	5.6	6.6	13	9.4	14	6.5	86 ²	13	33 ¹
Nickel, total	180 ¹	190 ¹	220 ²	56	88 ¹	200 ²	25	140 ¹	190 ¹	110 ¹	18	310 ²	350 ²	80 ¹
Zinc, total	61	39	36	21	45	41	38	180	34	55	39	47	39	57

* All concentrations are reported in parts per million (ppm).

1. Exceeds one-third of 10 times the STLC.

2. Exceeds 10 times the STLC.

Table 18

VOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A3

Compounds	<u>Borings</u>	
	AE3-10 (2-2.5')	AE2-4 (3-3.5')
----- No Compounds Were Detected -----		

Table 19

VOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
DISCRETE SOIL SAMPLES
STUDY AREA A - SUBAREA A3

Compounds*	Borings	
	AE3-10 (2-2.5)	AE2-4 (3-3.5')
Acetone	50	ND

* All concentrations reported in parts per billion (ppb).

ND = Not Detected

Table 20

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A3

Compounds*	Borings					
	AD2-1	AE3-10	AE2-1	AE2-2	AE2-3	AE2-4
Naphthalene	87	ND	ND	ND	ND	130
2-Methylnaphthalene	ND	ND	ND	ND	ND	342
Acenaphthene	120	ND	ND	ND	ND	ND
Dibenzofuran	67	ND	ND	ND	ND	ND
Fluorene	130	ND	ND	ND	ND	65
Phenanthrene	1,000 ¹	69	ND	ND	74	160
Anthracene	220	ND	ND	ND	ND	ND
Fluoranthene	1,400 ¹	72	ND	88	ND	ND
Pyrene	760	ND	ND	ND	ND	ND
Benzo(a)anthracene	450	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	2,700	2,200	830	ND	ND	870
Chrysene	460	ND	ND	ND	ND	92
Benzo(b)fluoranthene	600	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	360	ND	ND	ND	ND	ND
Benzo(a)pyrene	520	ND	ND	ND	ND	ND
Ideno(1,2,3-cd)pyrene	220	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	210	ND	ND	ND	ND	ND

* All concentrations are reported in parts per billion (ppb).

1. Exceeds one-third of the derived threshold value.

ND = Not Detected

Table 21

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A3

Compounds*	Borings					
	AD2-1	AE3-10	AE2-1	AE2-2	AE2-3	AE2-4
1-Ethyl-3-methylbenzene	2,000	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	2,400	ND	ND	ND	ND	ND
1-Ethyl-2-methylbenzene	1,400	ND	ND	ND	ND	ND
1,2,3-Trimethylbenzene	5,800	ND	ND	ND	ND	350
1,2,4-Trimethylbenzene	2,300	ND	ND	ND	ND	320
Unknown	800	ND	ND	ND	ND	ND
2-Methylpropylchlorotristannane	4,300	ND	ND	ND	ND	ND
Unknown	520	ND	ND	ND	ND	ND
Benzo[j]fluoranthene	560	ND	ND	ND	ND	ND
Tetradecane	ND	510	ND	ND	ND	2,600
Pentadecane	ND	690	ND	ND	ND	1,900
Heptadecane	ND	850	ND	ND	ND	1,400
2,6,10,14-Tetramethylheptadecane	ND	970	170	200	ND	1,600
Octadecane	ND	640	170	170	ND	1,500

Table 21

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
 STUDY AREA A - SUBAREA A3
 COMPOSITE SOIL SAMPLES
 (Continued)

Compounds [*]	Borings					
	AD2-1	AE3-10	AE2-1	AE2-2	AE2-3	AE2-4
Nonadecane	ND	550	ND	150	ND	ND
Eicosane	260	670	ND	160	ND	ND
Heneicosane	ND	680	170	190	ND	ND
Unknown	ND	ND	1,000	ND	ND	ND
Tetracosane	ND	ND	ND	160	ND	ND
Undecane	ND	ND	ND	ND	ND	820
Dodecane	ND	ND	ND	ND	ND	1,600
Tridecane	ND	ND	ND	ND	ND	2,600

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 22

METALS
COMPOSITE SOIL SAMPLES
STUDY AREA A - SUBAREA A3

Compounds*	Borings					
	AD2-1	AE3-10	AE2-1	AE2-2	AE2-3	AE2-4
Chromium, total	37	100	60	85	51	96
Copper, total	670 ¹	66	58	42	25	22
Lead, total	110 ¹	12	17 ²	87 ¹	16	14
Nickel, total	36	68 ¹	52	120 ¹	65	500 ¹
Zinc, total	950	62	57	72	55	41

* All concentrations are reported in parts per million (ppm).

1. Exceeds 10 times the STLC.

2. Exceeds one-third of 10 times the STLC.

Table 23

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA B - SUBAREA B1

Compounds*	Borings					
	BB2-2	BB2-7	BB2-8	BB2-11	BB3-1	BC2-2
Naphthalene	ND	ND	ND	960 ¹	ND	ND
2-Methylnaphthalene	ND	ND	ND	1,100	ND	ND
Phenanthrene	ND	470	ND	560	ND	ND
Fluoranthene	ND	730 ¹	ND	220	ND	ND
Pyrene	ND	540	ND	230	ND	ND
Benzo(a)anthracene	ND	130	ND	88	ND	ND
Bis(2-ethylhexyl)phthalate	470	830	670	3,000	1,800	1,500
Chrysene	ND	140	ND	290	ND	ND
Benzo(b)fluoranthene	ND	200	ND	150	ND	ND
Benzo(k)fluoranthene	ND	120	ND	ND	ND	ND
Benzo(a)pyrene	ND	210	ND	81	ND	ND
Ideno(1,2,3-cd)pyrene	ND	130	ND	ND	ND	ND
Benzo(g,h,i)perylene	80	170	ND	ND	ND	ND

* All concentrations are reported in parts per billion (ppb).

1. Exceeds one-third of the derived threshold value.

ND = Not Detected

Table 24

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA B - SUBAREA B1

Compounds*	Borings					
	BB2-2	BB2-7	BB2-8	BB2-11	BB3-1	BC2-2
Unknown	ND	ND	ND	ND	920	ND
Undecane	140	ND	740	2,700	ND	ND
Dodecane	100	ND	390	ND	ND	ND
Pentadecane	180	260	ND	ND	ND	ND
Hexadecane	260	ND	ND	ND	ND	ND
2,6,10,14-Tetramethylheptadecane	390	470	ND	ND	ND	ND
Octadecane	240	340	ND	2,600	ND	ND
Nonadecane	200	150	ND	ND	ND	ND
Eicosane	200	ND	ND	ND	ND	ND
Heneicosane	240	160	ND	ND	ND	ND
Tetradecane	ND	170	ND	ND	ND	ND
Decane	ND	ND	780	ND	ND	ND
2-Methylbenzenesulfonamide	ND	ND	470	ND	ND	ND
4-Methylbenzenesulfonamide	ND	ND	2,200	ND	ND	ND
Unknown	ND	ND	1,700	ND	ND	ND
Unknown	ND	ND	1,600	ND	ND	ND

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
 COMPOSITE SOIL SAMPLES
 STUDY AREA B - SUBAREA B1
 (Continued)

Compounds*	Borings					
	BB2-2	BB2-7	BB2-8	BB2-11	BB3-1	BC2-2
Unknown	ND	ND	850	ND	ND	ND
Unknown	ND	ND	430	ND	ND	ND
1,2,3-Trimethylbenzene	ND	ND	ND	1,900	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	3,400	ND	ND
6-Methyldodecane	ND	ND	ND	1,500	ND	ND
5-Propyltridecane	ND	ND	ND	2,400	ND	ND
Hepatadecane	ND	ND	ND	2,000	ND	ND
2,6,10,14-Tetramethylheptadecane	ND	ND	ND	3,300	ND	ND
1,1':3'1"-Terphenyl	ND	ND	ND	3,900	ND	ND
Terphenyl	ND	ND	ND	2,900	ND	ND
1,2,3,4-Tetrahydronaphthalene	ND	ND	ND	ND	ND	240
1,2,3,4-Tetrahydro-2-methylnaphthalene	ND	ND	ND	ND	ND	65
1,2,3,4-Tetrahydro-6-methylnaphthalene	ND	ND	ND	ND	ND	120
1,2,3,4-Tetrahydro-5-methylnaphthalene	ND	ND	ND	ND	ND	120
1,2,3,4-Tetrahydro-6,7-dimethylnaphthalene	ND	ND	ND	ND	ND	110

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

TOTAL HYDROCARBONS
DISCRETE SOIL SAMPLES
STUDY AREA B - SUBAREA B1

Compounds*	<u>Boring</u>
	BB2-11 (0.5-1')
Total hydrocarbons	16,000

* All concentrations are reported in parts per billion (ppb).

Table 26

METALS
COMPOSITE SOIL SAMPLES
STUDY AREA B - SUBAREA B1

Compounds*	Borings					
	BB2-2	BB2-7	BB2-8	BB2-11	BB3-1	BC2-2
Chromium, total	60	130	97	650	390	460
Copper, total	42	34	49	380 ¹	22	37
Lead, total	16	50 ¹	65 ¹	210 ¹	19 ²	19 ²
Nickel, total	470 ¹	320 ¹	200 ¹	180	1,300 ³	870 ³
Zinc, total	51	57	82	1,800 ³	19	59

* All concentrations are reported in parts per million (ppm).

1. Exceeds 10 times the STLC.

2. Exceeds one-third of 10 times the STLC.

3. Exceeds one-third the TTLC.

ND = Not Detected

Table 27

SEMIVOLATILE ORGANIC COMPOUNDS - PRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA B - SUBAREA B3

Compounds*	Borings			
	BE3-6	BF2-2	BF3-9	BG3-1
Phenanthrene	ND	80	ND	ND
Fluoranthene	ND	80	ND	ND
Pyrene	ND	76	ND	ND
Bis(2-ethylhexyl)phthalate	1,800	ND	1,100	ND

* All concentrations are reported in parts per billion (ppb).

ND = Not Detected

Table 28

SEMIVOLATILE ORGANIC COMPOUNDS - NONPRIORITY POLLUTANTS
COMPOSITE SOIL SAMPLES
STUDY AREA B - SUBAREA B3

Compounds*	Boring
	BE3-6
2,6,10,14-Tetramethylheptadecane	180
Octadecane	150
Heneicosane	150
Pentacosane	180
Heptacosane	250

* All concentrations are reported in parts per billion (ppb).

Table 29

METALS
COMPOSITE SOIL SAMPLES
STUDY AREA B - SUBAREA B3

Compounds*	Borings			
	BE3-6	BF2-2	BF3-9	BG3-1
Chromium, total	89	78	51	14
Copper, total	54	44	29	5.5
Lead, total	19 ¹	12	11	4.3
Nickel, total	76 ¹	73 ¹	41	25
Zinc, total	49	38	35	15

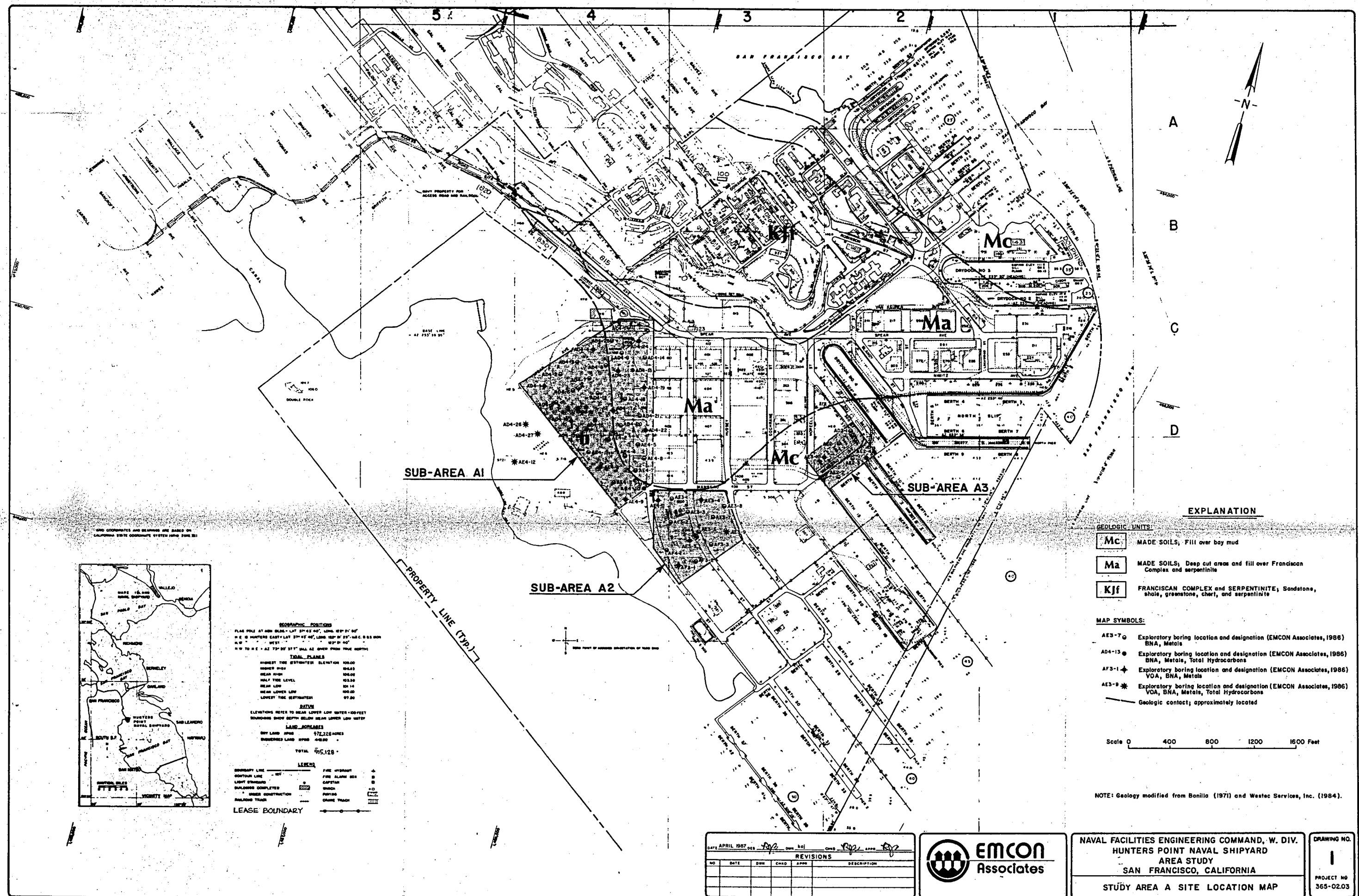
* All concentrations are reported in parts per million (ppm).

1. Exceeds one-third of 10 times the STLC.

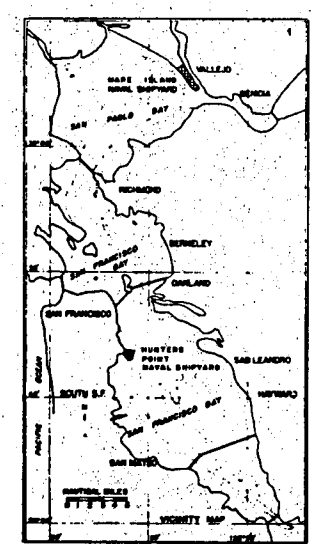
DRAWINGS

AREA STUDY FOR ASBESTOS-CONTAINING MATERIAL AND ORGANIC AND INORGANIC SOIL CONTAMINATION

DATED 2 JULY 1987



GRID COORDINATES AND BEARINGS ARE BASED ON CALIFORNIA STATE COORDINATE SYSTEM (NAD 83)



GEOGRAPHIC POSITION
PLAN: POLAR AT 40° 00' 00" N, LONG. 122° 29' 00" W
N.E. 1/4 HUNTERS EAST - LAT. 37° 45' 00" N, LONG. 122° 29' 00" W, U.S.C. 8.53 BOM
N.W. 1/4 HUNTERS WEST - LAT. 37° 45' 00" N, LONG. 122° 29' 00" W, U.S.C. 8.53 BOM
N.W. 1/4 HUNTERS WEST - LAT. 37° 45' 00" N, LONG. 122° 29' 00" W, U.S.C. 8.53 BOM
N.W. 1/4 HUNTERS WEST - LAT. 37° 45' 00" N, LONG. 122° 29' 00" W, U.S.C. 8.53 BOM

LOCAL CLIMATE
HIGHEST TIDE ESTIMATED ELEVATION 100.00
MEAN HIGH 96.00
MEAN LOW 92.00
MEAN LOWER LOW 88.00
LOWEST TIDE ESTIMATED 84.00

RAINFALL
ELEVATIONS REFER TO MEAN LOWER LOW WATER + 100 FEET
BOUNDRY LINE SHOWS BOUNDARY BETWEEN HUNTERS EAST AND WEST

LAND ACQUISITION
BUY LAND 1000 472,225 ACRES
REDEVELOP LAND 1000 400.00

TOTAL 915,125

LEGEND
BOUNDARY LINE
CONTOUR LINE
LIGHT SHADING
RAILROAD CORRELATION
RAILROAD TRACK
LEASE BOUNDARY
FIRE HYDRANT
FIRE ALARM BOX
CAPTAIN
PUMP
CRANE TRACK

- EXPLANATION**
- GEOLOGIC UNITS:**
- Mc** MADE SOILS, Fill over bay mud
 - Ma** MADE SOILS, Deep cut areas and fill over Franciscan Complex and serpentinite
 - KJf** FRANCISCAN COMPLEX and SERPENTINITE, Sandstone, shale, greenstone, chert, and serpentinite
- MAP SYMBOLS:**
- AE3-7** Exploratory boring location and designation (EMCON Associates, 1986) BNA, Metals
 - AD4-13** Exploratory boring location and designation (EMCON Associates, 1986) BNA, Metals, Total Hydrocarbons
 - AF3-1** Exploratory boring location and designation (EMCON Associates, 1986) VOA, BNA, Metals
 - AE3-9** Exploratory boring location and designation (EMCON Associates, 1986) VOA, BNA, Metals, Total Hydrocarbons
 - Geologic contact; approximately located
- Scale 0 400 800 1200 1600 Feet

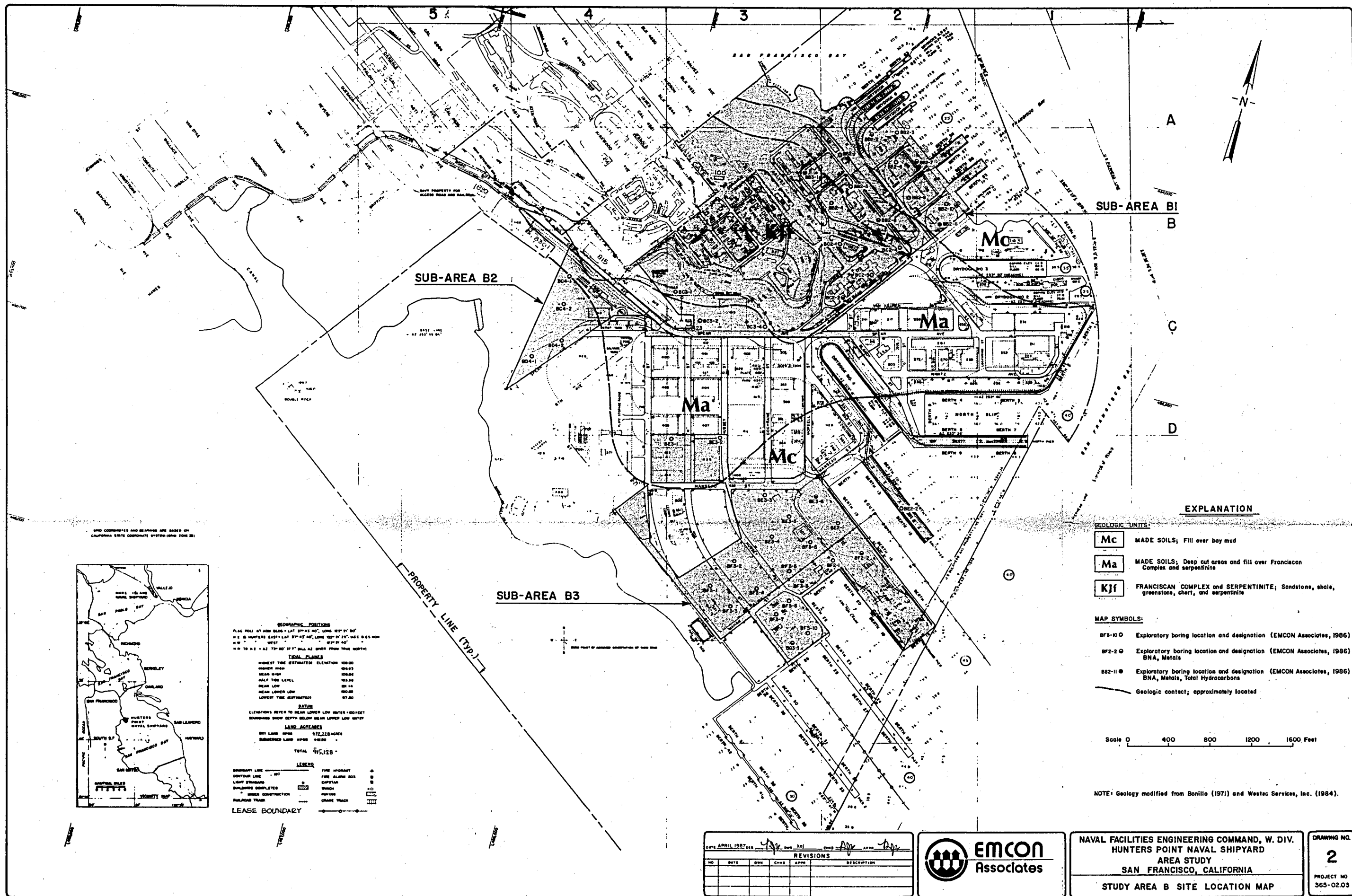
NOTE: Geology modified from Bonilla (1971) and Westec Services, Inc. (1984).

REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION
1	APRIL 1987	RPZ	RPZ	APPX RPZ
2				
3				
4				
5				

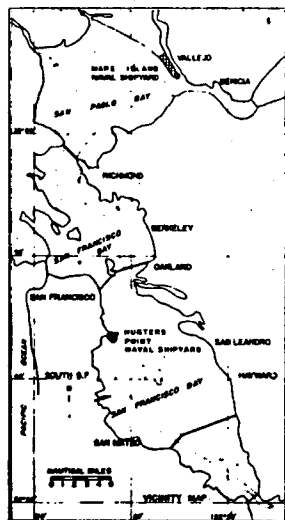


NAVAL FACILITIES ENGINEERING COMMAND, W. DIV.
HUNTERS POINT NAVAL SHIPYARD
AREA STUDY
SAN FRANCISCO, CALIFORNIA
STUDY AREA A SITE LOCATION MAP

DRAWING NO. 1
PROJECT NO 365-02.03



GRID COORDINATES AND BEARINGS ARE BASED ON CALIFORNIA STATE COORDINATE SYSTEM (JUNE 1981)



GEOGRAPHIC POSITIONS
FLAG POLE AT AREA B2: LAT 37°43'40" N, LONG 122°31'30" W
H & B WATERS EAST: LAT 37°43'40" N, LONG 122°31'30" W
H & B WATERS WEST: LAT 37°43'40" N, LONG 122°31'30" W
H & B WATERS SOUTH: LAT 37°43'40" N, LONG 122°31'30" W

TIDE PLANE
HIGHEST TIDE ESTIMATED ELEVATION 100.00
HIGHER HIGH 100.00
MEAN HIGH 100.00
MEAN TIDE LEVEL 100.00
MEAN LOW 99.16
MEAN LOWER LOW 98.00
LOWEST TIDE ESTIMATED 97.00

STATUS
ELEVATIONS REFER TO MEAN LOWER LOW WATER +0.00 FEET
BOUNDARIES SHOW DEPTH BELOW MEAN LOWER LOW WATER

LAND ACQUISITION
DRY LAND 1000 172,218 ACRES
SUBMERGED LAND 1000 4,000 ACRES
TOTAL 95,128 ACRES

LEGEND
PROPERTY LINE (TYP.)
LEASE BOUNDARY
FIRE HYDRANT
FIRE ALARM BOX
CAPTAIN
WHICH
PARKING
GRASS TRACK

EXPLANATION

- GEOLOGIC UNITS**
- Mc** MADE SOILS; Fill over bay mud
 - Ma** MADE SOILS; Deep cut areas and fill over Franciscan Complex and serpentinite
 - KJf** FRANCISCAN COMPLEX and SERPENTINITE; Sandstone, shale, greenstone, chert, and serpentinite
- MAP SYMBOLS:**
- BFS-100** Exploratory boring location and designation (EMCON Associates, 1986)
 - BFS-200** Exploratory boring location and designation (EMCON Associates, 1986) BNA, Metals
 - BFS-110** Exploratory boring location and designation (EMCON Associates, 1986) BNA, Metals, Total Hydrocarbons
 - Geologic contact; approximately located

NOTE: Geology modified from Bonilla (1971) and Westac Services, Inc. (1984).

REVISIONS				
NO	DATE	OWN	CHKD	APPR



NAVAL FACILITIES ENGINEERING COMMAND, W. DIV.
HUNTERS POINT NAVAL SHIPYARD
AREA STUDY
SAN FRANCISCO, CALIFORNIA
STUDY AREA B SITE LOCATION MAP

DRAWING NO.
2
PROJECT NO.
365-02.03

Appendix A
RATIONALE FOR CONCENTRATION LIMITS

Appendix A

RATIONALE FOR CONCENTRATION LIMITS

The concentration limit of 10 times the STLC is used as a threshold value to assess whether the total amount of a particular compound in a soil might pose a threat to underlying ground water. The rationale for this concentration limit is based on an analytical feature of the extraction process used to derive the soluble portion of that compound from soils. The concentration of a soluble compound is compared directly with its STLC value provided in Title 22 of the California Administrative Code. However, these concentrations are measured in the extract of the soil being tested, which has been derived by adding water to the soil in a 10 to 1 ratio. Thus, if the STLC for a particular compound is 10 parts per million (ppm), the smallest concentration of this compound which must be present in the soil in order to equal 10 ppm in the extract must be 10 times the STLC, or 100 ppm. In other words, if a soil contains a total of 100 ppm of a compound, and all of it is solubilized in the extraction test, then the final concentration in the extract will be 10 ppm. Therefore, to examine whether a compound may leach out of the soil to result in hazardous levels in the ground water, the total level of that compound in soil may be compared to 10 times its STLC.

If the total concentration of a particular compound in the soil exceeds 10 times the STLC, there is a possibility that the soluble portion of that compound will exceed the STLC. However, it is also possible, and often quite likely, that less than 100 percent of the compound will be solubilized by the extraction test and, therefore, the concentration in the extract may not exceed the STLC. In any case, the extraction test must be performed to investigate this possibility when the total concentration exceeds 10 times the STLC. If the total concentration in the soil does not exceed 10 times the STLC, then the soluble portion cannot exceed the STLC and no further testing is required.

Appendix B
SAMPLING, ANALYTICAL, AND SAFETY PROCEDURES

Appendix B

SAMPLING, ANALYTICAL, AND SAFETY PROCEDURES

SOIL SAMPLING PROCEDURES

Sample Collection

Sample collection procedures included soil sampling, equipment cleaning, and sample composition.

Soil Sampling

All soil samples for volatile organic compounds (EPA Method 8240) were collected and preserved by the field geologist in accordance with the following procedures.

1. Samples were collected in 304 stainless steel rings, 2 inches in diameter, 4 inches long, with a wall thickness of 0.065 inch.
2. The ends of the ring were sealed with a Teflon® wrap and polypropylene caps placed over the Teflon®.
3. The sealed ring was then placed in a glass jar with a screw-top lid.
4. The lid was secured, the glass jar labeled, chain-of-custody documentation completed, and the jar refrigerated.

Soil samples to be analyzed for SOC's, according to EPA Method 8270, and metals were collected and preserved by the field geologist in accordance with the following procedures.

1. Representative samples of the soil recovered from each of the three drives per boring were collected in 500-ml glass jars.

2. Teflon®-lined screw-top lids were secured onto the jars.
3. The glass jars were labeled, chain-of-custody documentation completed, and the jars refrigerated.

Representative samples were collected from three depth intervals: 0.5 to 2.0 feet, 2.0 to 3.5 feet, and 3.5 to 5.0 feet. For the 0.5- to 2.0-foot- and 3.5- to 5.0-foot-depth intervals, representative samples were obtained by driving a standard split-spoon sampler 18 inches into undisturbed ground by a 140-pound hammer falling 30 inches. The sampler was withdrawn from the boring and opened. A portion of the soil comprising the entire depth interval sampled with the standard split-spoon was collected in a 500-ml glass jar.

For the 2.0- to 3.5-foot-depth interval, samples were collected within a 2-inch-I.D. California split-spoon sampler. The sampler was driven 18 inches into undisturbed ground by a 140-pound hammer falling 30 inches. The sampler was withdrawn from the augers, opened, and the samples removed. The sampler was fitted with four clean stainless steel liners prior to being driven into the undisturbed ground. One of the four stainless steel liners was sealed and preserved for EPA Method 8240 analysis. The soil in the three remaining liners was field-extruded into the opened sampler. A portion of the soil from each of the three liners was collected in a 500-ml glass jar.

Equipment Cleaning

Glass sample containers, Teflon®-lined caps, and stainless steel liners were thoroughly washed with detergent, rinsed extensively with tap water, and then rinsed again with organic-free water. After washing and rinsing, containers, caps, and liners were dried overnight at a temperature of 150°C. Sample containers, caps, and liners were protected from all forms of solvent contact between the time of drying and actual usage at the sample site. After purchase and cleaning, sample containers, caps, and liners were used only once.

Before initiating drilling operations, all equipment that was placed in the boring, other than sample containers, caps, and liners, was disassembled and cleaned thoroughly by steaming with deionized water.

During field sampling, all equipment that was placed in the boring was cleaned after completing the boring. This cleaning was performed by steaming exposed surfaces with deionized, organic-free water.

Sample Composition

Soil samples were delivered under custody of the field geologist to EMCON's State-certified laboratory and released to the laboratory director. Soil samples for EPA Method 8270 and metals analyses were composited prior to being submitted for laboratory analysis with two or three discrete samples used to make up the composite. Soil samples for EPA Method 8240 were submitted directly to the laboratory performing the analysis without composition.

Discrete samples collected in 500-ml glass containers were used to make up the composites for EPA Method 8270 and metals analyses. Samples were composited on a boring to boring basis, with equal portions of samples collected at each of the depth intervals (0.5 to 2.0 feet, 2.0 to 3.5 feet, and 3.5 to 5.0 feet) used to make up the composites. When three discrete samples were collected at a boring, 50 grams of each discrete samples were combined to make up the composite. At two borings, sample recovery from the mid-depth interval (2.0 to 3.5 feet) was such that no soil was available for collection into a 500-ml glass container. In these cases, 75 grams of soil from the upper depth (0.5 to 2.0 feet) and 75 grams of soil from the lower depth (3.5 to 5.0 feet) were combined to make up the composite.

Analytical Procedures

Chemical and mineralogical analyses of soil samples were conducted in accordance with standard quantitative analytical procedures. Soil samples were analyzed according to methods presented in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (EPA SW-846, 1982). When applicable, contracts with outside laboratories stipulated that these methods be used. Procedures used to analyze the soil samples collected during this study are presented in Table 2 of this report.

Certified Analytical Reports are contained in Appendix E of this report.

SITE-SAFETY PLAN

This is a summary of the field investigation conducted by EMCON at HPNS. The safety plan of this study consisted of:

- Respirator training
- Cartridge selection
- Personnel protection equipment
- Decontamination
- Special precautions

Available data from previous borings was evaluated to determine the possibility of chemical exposure. From this data safety procedures were prescribed to protect field personnel from possible exposure.

Prior to initiating the field portion of the project, a training session was conducted to familiarize all personnel participating in field activities with the procedures used for site safety.

All field personnel involved were fit tested and instructed in the proper use of half-face and full-face respirators. Both a negative and

positive pressure test was performed by EMCON's safety officer. These tests are conducted to verify a proper seal and fit.

Instruction were then given in cartridge selection. A highly particulate cartridge was used at all times.

Personnel protective equipment was worn at all times during drilling operations. The personnel protective equipment consisted of hard hats, safety glasses, safety boots, Tyvek suits, and gloves. The wrist and ankle openings of the Tyvek suits were taped with duct tape to the wearer's gloves and boots, respectively. This prevented movement of the suit and further minimized dermal exposure.

Special safety requirements were required in Subarea A1 and A2 because of the possibility of exposure to PCBs. In Borings AD4-12, AD4-26, and AD4-27 in Subarea A1 and Boring AE3-9 in Subarea A2 the required personnel protective equipment was upgraded. A full-face respirator with a combination organic vapor and highly toxic particulate cartridge was required. Polycoated Tyvek was also worn to minimize exposure. Inner PVC gloves and outer neoprene gloves were also worn.

All personnel protective equipment was disposed of each day after work was completed. There were no reported injuries or illnesses that resulted from field assignments at HPNS.

Appendix C

BORING LOGS

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AC4-1

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/24/86

SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40			1	CL	ASPHALT AND GRAVEL-FILL
		58*	s,m,a		2		GRAVELLY CLAY-SERPENTINITE FILL; very dark gray (5Y, 3/1); 60% low- to moderate-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are soft to hard and consist of weak to deeply weathered serpentinite and serpentinitized peridotite; hard; damp.
		38			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD2-1

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 12/03/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		38			1	GW	ASPHALT AND GRAVEL-FILL
		55 *	s,m,a		2	SP	SANDY GRAVEL-FILL; dark brown (10YR, 4/3); 5% low-plasticity fines; 35% fine to coarse sand; 60% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and cemented sandstone; dense; dry.
		75			3		SAND-FILL; light olive brown (2.5Y, 5/6); 5% low-plasticity fines; 95% fine sand; dense to very dense; damp.
				5			@3.5': serpentinitized peridotite clast; trace wire.
							@5': serpentinitized peridotite clast.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-1

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/21/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55		1	SM		SILTY SAND TO GRAVELLY SAND-FILL; dark brown (10YR, 3/3); 5-15% low-plasticity fines; 6% fine to coarse sand; 25-35% fine and coarse gravel; clasts are hard and consist of quartz, chert, and serpentinitized peridotite; very dense; dry.
		85*	v s,m,a	2	GW		
		45		3			
				5			SANDY GRAVEL-SERPENTINITE FILL; very dark gray (5Y, 3/1); 5% low-plasticity fines; 25% fine to coarse sand; 70% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentinitized peridotite; dense; dry.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-2

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/24/86

SURFACE ELEV. 112' ±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT. SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		90		1	GM-GW	<p>SANDY GRAVEL TO SILTY GRAVEL-FILL; gray (5Y, 5/1); 5-15% low-plasticity fines; 30% fine to coarse sand; 55-60% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and cemented sandstone; very dense; dry.</p> <p>GRAVELLY SAND TO SILTY SAND-SERPENTINITE FILL; gray (5Y, 5/1); 5-15% low-plasticity fines; 60% fine to coarse sand; 25-35% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentinitized peridotite; very dense; damp.</p> <p>@3.5-4': dark brown (10YR, 3/3).</p> <p>BOTTOM OF BORING AT 5 FEET.</p>
		75*	s,m,a	2	SW	
		28		3		
				5		
				10		
				15		
				20		

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-3

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/24/86

SURFACE ELEV.

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40		1	SW		ASPHALT AND GRAVEL-FILL
		32*	s,m,a	2			GRAVELLY SAND-SERPENTINITE FILL; gray (5Y, 5/1); 5% low-plasticity fines; 60% fine to coarse sand; 35% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentinitized peridotite; dense to very dense; dry.
		16		3	CL		@1.5-2': silty sand layer; very dark gray (5Y, 3/1).
				5			GRAVELLY CLAY-SERPENTINITE FILL; very dark gray (5Y, 3/1); 60% low- to moderate-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts as above; stiff; damp.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03


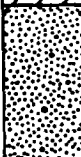
BORING NO. AD4-4

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/24/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		37		1	CL		ASPHALT AND GRAVEL-FILL
		18*	s,m,a,v	2	SW		GRAVELLY CLAY-FILL; dark brown (10YR, 3/3); 60% low-plasticity fines; 20% fine to coarse sand; 20% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and cemented sandstone; dry to damp.
		18		3			GRAVELLY SAND-SERPENTINITE FILL; gray (5Y, 5/1); <5% low-plasticity fines; 60% fine to coarse sand; 35% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentinitized peridotite; medium dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-5

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/21/86

SURFACE ELEV. 111'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100			1	GW	SANDY GRAVEL-FILL; dark brown (10YR, 3/3); 5% low-plasticity fines; 40% fine to coarse sand; 55% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, chert, and cemented sandstone; dense to very dense; dry. @1/2': piece of fibrous material. CLAYEY SAND TO GRAVELLY SAND-SERPENTINITE FILL; very dark gray (5Y, 3/1) and black (5Y, 2.5/1); 5-15% low-plasticity fines; 50% fine to coarse sand; 35-65% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentized peridotite; medium dense; damp. BOTTOM OF BORING AT 5 FEET
		36*	s,m,a		2		
		24			3	SC-SW	
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete t surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-6

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/21/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		33			1		GRAVELLY SAND-SERPENTINITE FILL; gray (10YR, 5/1); 5% low-plasticity fines; 60% fine to coarse sand; 35% fine and coarse gravel; clasts are soft to hard and consist of weak to deeply weathered serpentinite and serpentinitized peridotite; dense; damp.
		42*	s,m,a		2		
		21			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-7

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/21/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		43			1	GC	ASPHALT AND GRAVEL-FILL
		56*	s		2		CLAYEY GRAVEL-FILL; very dark gray (5Y, 3/1); 20-30% low-plasticity fines; 35% fine to coarse sand; 35-45% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite, claystone, and cemented sandstone; dense to very dense; damp.
		27			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-8

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 11/21/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100			1	GM- GW	ASPHALT AND GRAVEL-FILL
		26*	s,m,a		2	GW	SILTY GRAVEL TO SANDY GRAVEL-FILL; dark brown (10YR, 3/3); 5-15% low-plasticity fines; 30% fine to coarse sand; 55-65% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and cemented sandstone; medium dense to dense; dry.
		17			3		SANDY GRAVEL-SERPENTINITE FILL; gray (10YR, 5/1); 5% low-plasticity fines; 40% fine to coarse sand; 55% fine and coarse gravel; clasts are soft to hard and consist of weakly- to deeply-weathered serpentinite and serpentinitized peridotite; medium dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03


BORING NO. AD4-9

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		25		1	GM- GW CL		SILTY GRAVEL TO SANDY GRAVEL-FILL; dark yellowish brown (10YR, 3/4); 5-15% low-plasticity fines; 40% fine to coarse sand; 45-55% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and siliceous claystone; medium dense; dry. GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 60% low plasticity fines; 20% fine to coarse sand; 20% fine and coarse gravel; clasts are hard and consist of black serpentinite and siliceous claystone; very stiff; damp. BOTTOM OF BORING AT 5 FEET.
		16*	s,m,a	2			
		19		3			
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AD4-10

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		39			1	SC-SW	CLAYEY SAND TO GRAVELLY SAND-SERPENTINITE FILL; gray (10YR, 5/1) and black (5Y, 2.5/1); 5-15% low-plasticity fines; 60% fine to coarse sand; 25-35% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentinized peridotite; dense; damp.
		27*	s,m,a,v		2		
		26			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AD4-11

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		70		1	SC-SW		GRAVELLY SAND TO CLAYEY SAND-SERPENTINITE FILL; gray (10YR, 5/1); 5-15% low-plasticity fines; 50% fine to coarse sand; 35-45% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentinized peridotite; medium dense to very dense. damp.
		55*	s,m,a	2			
		26		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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BORING NO. AD4-12

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		66			1	CL	SANDY CLAY-FILL; dark brown (10YR, 3/3);
		>100*	s, m, a		2		60% low- to moderate-plasticity
		45			3		finer; 20-35% fine to coarse sand; 5-
				5			20% fine and coarse gravel; clasts
							are hard and consist serpentinitized
							peridotite and siliceous claystone;
							hard; damp.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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BORING NO. AD4-13

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112' ±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		49			1	CL	GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 20% low-plasticity fines; 25% fine to coarse sand; 45% fine and coarse gravel; clasts are hard and consist of cemented sandstone, serpentized peridotite, and siliceous claystone; very dense; damp. @1.5': 3" sand layer.
		55	h		2		
		57*	s,m,a		3		
		140			4		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AD4-14

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		36		1	CL-CH		GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 70% moderate- to high-plasticity fines; 15% fine to coarse sand; 15% fine and coarse gravel; clasts are hard and consist of serpentized peridotite; dense; damp.
		39*	s,m,a	2			03.5': occasional dark brown (10YR, 3/3) sandy pockets.
		27		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AD4-15

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SURFACE ELEV. 112' ±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		21			1	CL	GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 60% low-plasticity fines; 15-20% fine to coarse sand; 20-25% fine and coarse gravel; clasts are hard and consist of serpentized peridotite and siliceous claystone; very very stiff; damp.
		25*	s,m,a		2		
		37			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		20			1	CL	GRAVELLY CLAY-FILL; dark brown (10YR, 3/3); 60% low-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of serpentinite and siliceous claystone; very stiff; damp.
		18*	s,m,a		2		
		14			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		120			1	CL	GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 65% low- to moderate-plasticity fines; 15% fine to coarse sand; 15% fine to coarse gravel; clasts are hard and consist of serpentized peridotite; hard; damp. @3': trace hard, white material. @4.5': trace wood fragments.
		125*	v s,m,a		2		
		65			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon spampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		90		1	GC		CLAYEY GRAVEL-FILL; dark grayish brown (2.5Y, 4/2); 15-30% low-plasticity fines; 20% fine to coarse sand; 50-65% fine and coarse gravel; clasts are hard and consist of cemented sandstone, siliceous claystone, and serpentinite; dense to very dense; dry.
		47*	s,m,a	2			@3': soil has metallic luster; iron oxide stained.
		36		3			@3.5': 20% hard serpentinitized peridotite clasts.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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BORING NO. AD4-19

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SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		85		1	GC		CLAYEY GRAVEL-FILL; very dark gray (5Y, 3/1); 15-25% low-plasticity fines; 25% fine to coarse sand; 50-60% fine and coarse gravel; clasts are hard and consist of angular, siliceous claystone, quartz diorite, and serpentized peridotite; very dense; damp.
		>100*	v s,m,a	2			@3': hard serpentized peridotite clasts.
		22		3			BOTTOM OF BORING AT 5 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		46		1	CL		ASPHALT AND GRAVEL-FILL
		65*	s,m,a	2			SANDY CLAY-FILL; dark brown (10YR, 3/3); 55% low-plasticity fines; 30% fine to coarse sand; 15% fine to coarse gravel; clasts are hard and consist of cemented sandstone, siliceous claystone, and serpentinized peridotite; hard; damp.
		45		3	SW		CLAYEY SAND TO GRAVELLY SAND-SERPENTINITE FILL; gray (7.5Y/R, 5/0); 10-20% low-plasticity fines; 65% fine to medium sand; 5% coarse sand; 15-25% fine to coarse gravel; clasts are soft to hard and consist of weakly- to deeply-weathered serpentinite and serpentinized peridotite; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			



REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		90		1	CL		GRAVELLY CLAY-FILL; dark brown (10YR, 3/3); 55% low-plasticity fines; 15-25% fine to coarse sand; 20-30% fine and coarse gravel; clasts are hard and consist of siliceous claystone, serpentinite and cemented sandstone; hard damp.
		70*	s,m,a	2	GC		CLAYEY GRAVEL-SERPENTINITE FILL; gray (7.5YR, 5/0); 15% low-plasticity fines; 35% fine to coarse sand; 50% fine and coarse gravel; clasts are soft to hard and consist of weakly- to deeply-weathered serpentinite and serpentinitized peridotite; very dense; damp.
		49		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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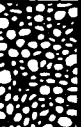


BORING NO. AD4-22

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		135		1	GW		SANDY GRAVEL-FILL; brown (10YR, 5/3); 5% low-plasticity fines; 20% fine sand; 10% medium sand; 10% coarse sand; 55% fine and coarse gravel; clasts are hard and consist of siliceous claystone and quartz diorite; dense to very dense; dry.
		70*	v s,m,a	2	GC		CLAYEY GRAVEL-FILL; brown (10YR, 5/3); and black (5Y, 2.5/1); 20% low-plasticity fines; 20-30% fine to coarse sand; 50-60% fine and coarse gravel; clasts are as above; dense to very dense; damp.
		51		3	CL		GRAVELLY CLAY-SERPENTINITE FILL; gray (7.5Y, 5/0); 60% low-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are soft to hard and consist of weakly- to deeply-weathered serpentinite and serpentinized peridotite; hard; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		150			1	GW	SANDY GRAVEL-FILL; dark brown (10YR, 3/3); 5% low-plasticity fines; 35-40% fine to coarse sand; 55-60% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and siliceous claystone; very dense; dry.
		34*	s,m,a,v		2	GC	
		140			3		CLAYEY GRAVEL-SERPENTINITE FILL; gray (10YR, 5/1); 15% low-plasticity fines; 25% fine to coarse sand; 60% fine and coarse gravel; clasts are soft to hard and consist of deeply weathered serpentinite and serpentinitized peridotite; very dense; damp.
				5			
				10			
				15			
				20			

BOTTOM OF BORING AT 4.5 FEET.

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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BORING NO. AD4-24

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SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55		1	GC		CLAYEY GRAVEL-FILL; dark grayish brown (10YR, 4/1); 20-30% low-plasticity fines; 30% fine to coarse sand; 40-50% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite, chert, and siliceous claystone; very dense; damp. @3.5': medium dense.
		37*	s,m,a,v	2			
		24		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03



BORING NO. AD4-25

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SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40		1	CL		GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 60% low-plasticity fines; 15-20% fine to coarse sand; 20-25% fine and coarse gravel; 1-2% shell fragments; 20-25% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and quartz; hard; damp.
		80*	s,m,a	2			
		32		3	GC		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 20% low-plasticity fines; 20-30% fine to coarse sand; 50-60% fine and coarse gravel; clasts are hard and consist of chert, cemented sandstone and weakly- to deeply-weathered serpentinite and serpentinitized peridotite; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AD4-26

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SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		10			1	SM	SILTY SAND-FILL, dark brown (10YR, 3/3); 20% low-plasticity fines; 75% fine sand; 5% fine gravel; medium dense; damp.
		22*	s,m,a,h,v		2	SW	SAND-FILL; olive (5Y, 5/4); <5% low-plasticity fines; 85% medium to coarse sand; 5% fine sand; trace black oil staining; medium dense; damp.
		90			3	SC	CLAYEY SAND-FILL; dark brown (10YR, 3/3) and black (5Y, 2.5/1); 15-40% low-plasticity fines; 50% fine to medium sand; 10-35% fine gravel; trace oil staining; very dense; moist.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03





BORING NO. AD4-27

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/24/86

SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		22		1	GP		SANDY GRAVEL-FILL; dark brown (10YR, 3/3); <5% low-plasticity fines; 25% fine to coarse sand; 70% fine gravel; clasts are hard and consist of serpentinitized peridotite, cemented sandstone, and chert; medium dense; dry.
		53*	s, m, a, h, v	2	SC-CL		
		35		3			CLAYEY SAND TO SANDY CLAY-FILL; gray (5Y, 5/1); 30-60% low-plasticity fines; 25-55% fine to medium sand; 15% fine gravel; 1-2% shell fragments; occasional black pockets; very stiff-dense; moist.
				5			
				10			BOTTOM OF BORING AT 5 FEET.
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE2-1

PROJECT NAME HPNS-ASBESTOS STUDY

PAGE 1 OF 1

BY SK DATE 12/03/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100			1	GC- GW	ASPHALT AND GRAVEL-FILL
		70*	s,m,a		2		CLAYEY GRAVEL TO SANDY GRAVEL-FILL; 5- 20% low-plasticity fines; 35% fine to coarse sand; 45-65% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, cemented sandstone, and chert; dense to very dense; dry to damp.
		24			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE2-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		170			1	GC- GW	ASPHALT AND GRAVEL-FILL
		55*	s,m,a		2		CLAYEY GRAVEL TO SANDY GRAVEL-FILL; dark brown (10YR, 4/3); 5-20% low-plasticity fines; 35% fine to coarse sand; 45-60% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite, chert, and cemented sandstone; dense to very dense; dry to damp.
		100<			3		BOTTOM OF BORING AT 4.5 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE2-3

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		50			1	GC- GW	ASPHALT AND GRAVEL-FILL
		90 *	s,m,a		2		CLAYEY GRAVEL TO SANDY GRAVEL-FILL; dark brown (10YR, 4/3); and gray (5Y, 5/1); 5-20% low-plasticity fines; 30% fine to coarse sand; 50-65% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, cemented sandstone, chert, and basalt; dense to very dense; dry to damp.
		90			3		@2-2.5': gravelly sand layer.
					5		BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE2-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100		1	GW-GC		ASPHALT AND GRAVEL-FILL
		75 *	s,m,a v	2			SANDY GRAVEL TO CLAYEY GRAVEL-FILL; dark brown (10YR, 4/3); 5-15% low-plasticity fines; 35% fine to coarse sand; 50-60% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite, serpentinite, and cemented sandstone; dense; dry.
		45		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

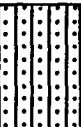

BORING NO. AE3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/18/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		9		1	SM- SP		SILTY SAND-FILL, dark brown (10YR, 3/3); 30-40% low-plasticity fines; 55-65% very fine sand; 5% fine gravel; loose; dry.
		26*	s,m,a	2	CL		GRAVELLY CLAY-FILL very dark gray (5Y, 3/1); 60% low-plasticity fines; 15% fine to coarse sand; 25% fine to coarse gravel; clasts are soft, angular, black serpentinized peridotite; very stiff; damp.
		55		3			@ 4.5-5: cemented sandstone clast.
		>100		5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03



BORING NO. AE3-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/17/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		12		1	SM- SP		ASPHALT AND GRAVEL-FILL SILTY SAND TO GRAVELLY SAND-FILL; red- dish brown (5Y, 4/3); 5-10% low-plas- ticity fines; 70% fine sand; 10% med- ium to coarse sand; 10-15% fine gra- vel; clasts are hard and consist of serpentinized peridotite, cemented sandstone, and chert; medium dense; damp.
		20*	s,m,a	2	GC		CLAYEY GRAVEL-FILL; dark brown (10YR, 3/3); 15% low-plasticity fines; 35% fine to coarse sand; 50% fine and coarse gravel; clasts are as above; medium dense; damp.
				3			BOTTOM OF BORING AT 7 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-
spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler.
Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface.
Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-3

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/18/86

SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		42			1	SM-SP	ASPHALT AND GRAVEL-FILL
		80*	s,m,a		2		GRAVELLY SAND TO SILTY SAND-FILL; dark yellowish brown (10Y, 4/4); 5-15% low-plasticity fines; 60-80% fine sand; 15% fine gravel; clasts are hard and consist of serpentinitized peridotite, serpentinite, and quartz diorite; dense; dry.
		27			3	CL	SANDY CLAY-FILL; very dark gray (5Y, 3/1); 55% low-plasticity fines; 30% fine to medium sand; 15% fine and coarse gravel; clasts as above; very stiff; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/18/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40		1	SM-SW		ASPHALT AND GRAVEL-FILL
		80*	s,m,a	2			SILTY SAND TO GRAVELLY SAND-FILL; dark yellowish brown (10YR, 4/4); 5-15% low-plasticity fines; 65% fine to medium sand; <5% coarse sand; 15-25% fine and coarse gravel; clasts are hard and consist of cemented sandstone and black serpentinite; dense; dry.
		72		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-5

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		23			1	SM-SW	SILTY SAND TO GRAVELLY SAND-FILL; brown (10YR, 5/3); 5-15% low-plasticity e fines; 60% fine to coarse sand; 25-35% fine and coarse gravel; clasts are hard and consist of chert and serpentized peridotite; medium dense; dry. @2.5': very dark gray (5Y, 3/1). CLAYEY GRAVEL-FILL; reddish brown (5YR, 4/3); 20% low-plasticity fines; 35% fine to coarse sand; 55% fine to coarse gravel; clasts are hard and consist of chert and serpentized peridotite; very dense; damp. BOTTOM OF BORING AT 5 FEET.
		60 *	s, m, a		2		
		70			3	CL-GC	
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-6

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		65			1	GC	ASPHALT AND GRAVEL-FILL
		120 *	s,m,a		2		CLAYEY GRAVEL-FILL; dark brown (10YR, 3/3); 15-20% low-plasticity fines; 20-25% fine to coarse sand; 60% fine and coarse gravel; clasts are hard and consist of cemented sandstone and quartz; very dense; damp.
		55			3	CL	GRAVELLY CLAY-FILL; reddish brown (5YR, 4/3); 60% low-plasticity fines; 10-15% fine to coarse sand; 25-30% fine and coarse gravel; clasts as above; very stiff; damp.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-7

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/17/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		32		1	GP		ASPHALT AND GRAVEL-FILL
		75 *	s,m,a	2			SANDY GRAVEL-FILL; light olive brown (2.5Y, 5/4); <5% low-plasticity fines; 40-45% fine to coarse sand; 50-55% fine gravel; 1-2% cobbles; clasts are hard and consist of serpentinized peridotite and cemented sandstone; dense to very dense; dry.
		13		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-8

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/17/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		12			1	CL	ASPHALT AND GRAVEL-FILL
		12*	s,m,a		2		SANDY CLAY-FILL; reddish brown (5YR, 4/3); 70% low-plasticity fines; 15-25% fine to coarse sand; 5-15% fine and coarse gravel; clasts are hard and consist of cemented sandstone, serpentinitized peridotite, and basalt; stiff to very stiff; damp.
		14			3	SP	@1.5': olive (5Y, 4/3); 5% fine gravel.
				5			SAND-FILL; light olive brown (2.5Y, 5/4); <5% low-plasticity fines; 90% fine sand; 5% fine gravel; loose to medium dense; damp to moist.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE3-9

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/24/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		22			1	CL	ASPHALT AND GRAVEL-FILL
		64 *	s,m,a		2		GRAVELLY CLAY-FILL; dark brown (10YR, 3/3); 70% low- to moderate-plasti- city fines; 10% fine to coarse sand; 20% fine gravel; clasts are soft to hard and consist of weakly to deeply weathered serpentinite and serpentini- zed peridotite and hard cemented sandstone; very stiff; dry.
		30			3		@1': 4" layer of sand. @2.5': very dark gray (5Y, 3/1). @3': dark brown (10YR, 3/3); 55% low- plasticity fines; 25% fine to coarse sand; 20% gravel.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-
spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler.
Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface.
Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03


BORING NO. AE3-10

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		70		1	GC		ASPHALT AND GRAVEL-FILL
		100 *	s,m,a	2	GC- GW		CLAYEY GRAVEL-FILL; dark brown (10YR, 4/3); 20% low- to moderate-plasticity fines; 20% fine to coarse sand; 40% fine and coarse gravel; 5% cobbles; clasts are hard and consist of serpentized peridotite, cemented sandstone, and chert; dense to very dense; dry to damp.
		65		3			@2': 40% sand; 45-55% gravel.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/20/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		32			1	GC- CL	ASPHALT AND GRAVEL-FILL
		42*	s,m,a		2		CLAYEY GRAVEL TO GRAVELLY CLAY-FILL; dark brown (10YR, 3/3); 25-60% low- plasticity fines; 15% fine to coarse sand; 25-60% fine and coarse gravel; clasts are hard and consist of ser- pentinized peridotite; dense to very stiff; damp.
		23			3	SC- SP	CLAYEY SAND TO GRAVELLY SAND-SERPENTIN- ITE FILL; gray (10YR, 5/1); 5-15% low-plasticity fines; 60% fine to coarse sand; 2-35% soft to hard serpentinite.
							BOTTOM OF BORING AT 5 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/19/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55		1	SC- SP		CLAYEY SAND TO GRAVELLY SAND-SERPENTIN- ITE FILL; gray (7.5YR, 5/0); 5-20% low-plasticity fines; 60% fine to coarse sand; 20-35% fine and coarse gravel; clasts are soft to hard and consist of serpentinite; dense; damp.
		55*	s,m,a	2			
		44		3			@4.5': dark yellowish brown (10YR, 4/6); <5% low-plasticity fines; 95% fine sand; medium dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-
spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler.
Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface.
Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-3

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/19/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		53			1	CL	ASPHALT AND GRAVEL-FILL
		29*	s,m,a,v		2	SP- SC	@1/2': gravelly clay layer.
		21			3		GRAVELLY SAND TO CLAYEY SAND-SERPENTIN- ITE FILL; gray (7.5YR, 5/0); 5-15% low-plasticity fines; 60% fine to coarse sand; 25-35% fine and coarse gravel; clasts are soft to hard and consist of deeply weathered serpen- tinite; very dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/18/86

SURFACE ELEV. 111'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		27			1	GC	CLAYEY GRAVEL-SERPENTINITE FILL; very dark gray (5Y, 3/1); 15-20% low-plasticity fines; 10-15% fine to coarse sand; 70% fine and coarse gravel; clasts are soft and consist of deeply-weathered serpentinite; medium dense; damp.
		75*	s,m,a		2		
		16			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-5

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/19/86

SURFACE ELEV. 111'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40			GP		GRAVEL-FILL; coarse (1/2') baserock.
		36*	S,m,a		SP		GRAVELLY SAND-FILL; dark yellowish brown (10YR, 4/4); <5% low-plasticity fines; 55% fine to medium sand; 40% fine to coarse gravel; clasts are hard and consist of serpentinitized peridotite and siliceous claystone; dense; damp.
		35			CL		GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 60% low- to moderate-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are as above; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-6

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/19/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40			1	SM	SILTY SAND-FILL CLAYEY SAND TO GRAVELLY SAND-FILL; gray (7.5YR, 5/0); 5-20% low-plasticity fines; 50-65% fine to coarse sand; 30% soft to hard, deeply-weathered serpentinite; dense; damp to dry.
		35*	s,m,a		2	SC-	
		14			3	SP	
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-7

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/19/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		60			1	GP	GRAVEL-FILL; coarse (4") baserock.
		120*	s,m,a		2	GP- GC	SANDY GRAVEL TO CLAYEY GRAVEL-FILL; dark brown (10YR, 3/3); 5-15% low-plasticity fines; 20-40% fine to coarse sand; 45-70% fine and coarse gravel; <5% cobbles; clasts are hard and consist of serpentized peridotite and quartz diorite; very dense; damp.
		39			3	CL	SANDY CLAY-FILL; very dark gray (5Y, 3/1); 60% low- to moderate-plasticity fines; 30-35% fine to coarse sand; 5-10% fine and coarse gravel; clasts are soft to hard and consist of weakly to deeply-weathered serpentinite; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-8

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		50		1	GP	CL	GRAVEL-FILL; coarse baserock.
		75*	s,m,a	2			GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 65% low- to moderate-plasticity fines; 10-15% fine to coarse sand; 20-25% fine and coarse gravel; clasts consist of hard, angular serpentinite; damp.
		45		3	GP		@1-2': 1-2% shell fragments. @2.5-3': serpentinitized peridotite clasts.
				5			SANDY GRAVEL-SERPENTINITE FILL; gray (7.5YR, 5/0); <5% low-plasticity fines; 30% fine to medium sand; 5% coarse sand; 60% soft to hard, angular, weakly to deeply-weathered serpentinite; dense; damp.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03



BORING NO. AE4-9

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		29		1	GC		ASPHALT AND GRAVEL-FILL
		43*	s,m,a,v	2			CLAYEY GRAVEL-SERPENTINITE FILL; gray (5Y, 3/1); 20% low-plasticity fines; 80% soft to hard angular serpentinite fragments; medium dense; damp.
		21		3	CL		GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 55% low-plasticity fines; 15-20% fine to coarse sand; 20-30% fine and coarse gravel; clasts are hard and consist of cemented sandstone, claystone, and serpentinite; very stiff; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AE4-10

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 108'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		16		1	CL		ASPHALT AND GRAVEL-FILL.
		32*	s,m,a	2			GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); and reddish brown (5YR, 4/3); 60% low-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, quartz, and cemented sandstone; stiff; damp.
		15		3			SILTY CLAY-FILL; very dark gray (5Y, 3/1); 80% low- to moderate-plasticity fines; 5-10% fine to coarse sand; 10-15% fine and coarse gravel; clasts as above; stiff; moist.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AE4-11

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		20		1	SM		SILTY SAND-FILL; very dark gray (10YR, 3/1); 30% low-plasticity fines; 55% fine sand; 5% fine gravel; medium dense; damp.
		35 *	s,m,a	2			@1-1.5': clayey sand layer; 3% cemented sandstone clasts.
		11		3	CL		@1.5-2': serpentized peridotite clast.
				5			SANDY CLAY-FILL; very dark gray (5Y, 3/1); 60% low-plasticity fines; 25% fine to coarse sand; 15% fine gravel; clasts consist of soft, black angular serpentinite and hard cemented sandstone; stiff; moist.
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AE4-12

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		>100		1	1	SM	SILTY SAND-FILL; dark brown (10Y, 3/3); 20% low-plasticity fines; 70% fine sand; 10% fine gravel; medium dense; dry.
		35*	s,m,a,h,v	2	2		@1.5-3': 1% copper wire and metal; occasional white and black pockets; occasional clayey pockets.
		120		3	3		@3': 15-25% fine gravel.
				5			BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.03

BORING NO. AF3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		12			1	CL	GRAVELLY CLAY-FILL; reddish brown (5YR, 4/3); 60% low-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of cemented sandstone and serpentinized peridotite; stiff; damp. @3': very dark gray (5Y, 3/1).
		19*	s,m,a v		2		
		182			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03


BORING NO. AF3-2

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		13		1	CL		ASPHALT AND GRAVEL-FILL. GRAVELLY CLAY-FILL; reddish brown (5YR, 4/3) and very dark gray (5Y, 3/1); 65% low-plasticity fines; 10-15% fine to coarse sand; 15-25% fine and coarse gravel; clasts are hard and consist of chert and cemented sandstone; stiff; damp.
		38 *	s,m,a	2			
		14		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03

BORING NO. AF3-3

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		26			1	SP	ASPHALT AND GRAVEL-FILL.
		60*	s,m,a		2		SAND-FILL; light olive brown (2.5Y, 5/4); <5% low-plasticity fines; 85-90% fine sand; 5-10% fine gravel; clasts are hard and consist of cemented sandstone; medium dense; damp.
		25			3	CL	GRAVELLY CLAY-FILL; olive brown (2.5Y, 4/4); 60% low-plasticity fines; 15% fine to coarse sand; 25% fine gravel; clasts are hard and consist of serpentinized peridotite and cemented sandstone; very stiff; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.03


BORING NO. AF4-1

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		22			GM-1GW		ASPHALT AND GRAVEL-FILL. SILTY GRAVEL TO SANDY GRAVEL-FILL; dark brown (7.5YR, 3/2); 5-15% low-plasticity fines; 20-30% fine to medium sand; 65% fine and coarse gravel; clasts are hard and consist of claystone, cemented sandstone and deeply weathered serpentinite; medium dense; dry. @4-5': chert. BOTTOM OF BORING AT 5 FEET.
		100*	s,m,a		2		
		>100			3		
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. 882-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/01/86

SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		35		1		ASPHALT AND GRAVEL-FILL	
		42*	a	2		SERPENTINITE-BEDROCK; gray (5Y, 3/1); serpentine and srpentinized peridotite; soft to moderate hardness; moderate to deeply weathered.	
		41		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

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PROJECT NUMBER 365-02.04

BORING NO. BB2-2

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		53			1	GC	ASPHALT AND GRAVEL-FILL
		38*	s,m,a		2	GW	CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 20% low- to moderate-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of cemented sandstone, serpentized peridotite, and chert; very dense; damp.
		43			3		SANDY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 5% low-plasticity fines; 40% fine to coarse sand; 55% fine and coarse gravel; clasts as above; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BB2-3

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		76			1	SP	ASPHALT AND GRAVEL-FILL
		75*			2		SAND-FILL; dark brown (10YR, 4/3); 5% low-plasticity fines; 95% fine sand; dense to very dense; damp. @2-3': serpentinized peridotite clasts.
		41			3	GC	CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 20% low- to moderate-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentinized peridotite, chert, and cemented sandstone; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BB2-4

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		72			1	SERP	SERPENTINITE-BEDROCK; gray (5Y, 3/1); serpentine and serpentinized peridotite; soft to moderate hardness; moderately to deeply weathered.
		50*	a		2		
		21			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04


BORING NO. BB2-5

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV.

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		35		1	GC		ASPHALT AND GRAVEL-FILL GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 55% low-plasticity fines; 20% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of serpentinite and serpentinized peridotite; very stiff; damp.
		17*	a	2			
		16		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with concrete. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BB2-6

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100			1 GW		ASPHALT AND GRAVEL-FILL
		40*			2 GC		SANDY GRAVEL-FILL; brown (10YR, 5/3); 5% low-plasticity fines; 45% fine to coarse sand; 50% fine and coarse gra- vel; dense to very dense; dry.
		64			3		CLAYEY GRAVEL-FILL; dark brown (10YR, 4/3); 20% low- to moderate-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and composed of serpentized peridotite, chert, and cemented sand- stone; dense; dry to damp.
				5			BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-
spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler.
Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface.
Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04


BORING NO. BB2-7

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112' ±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		57		1	GC		ASPHALT AND GRAVEL-FILL CLAYEY GRAVEL-FILL; very dark gray (5Y, 3/1); 20% low- to moderate-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and cemented sandstone; dense to very dense; damp. @1.5'; 1-2% asphalt fragments in 6" fine sand layer. @3': 1% wood fragments.
		40*	s,m,a	2			
		37		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04


BORING NO. 882-8

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/02/86

SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		34		1	GC		ASPHALT AND GRAVEL-FILL CLAYEY GRAVEL-FILL; very dark gray (5Y, 3/1); 25% low- to moderate-plasticity fines; 25% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite and cemented sandstone; dense; dry to damp. @4': 1-2% cobbles; medium dense.
		37*	s,m,a	2			
		13		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger-cuttings to 3/4-foot, concrete to surface. Surface is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BB2-9

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/02/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		48		1	GC		ASPHALT AND GRAVEL-FILL
		48*	a	2			CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4) and very dark gray (5Y, 3/1); 20% low- to moderate-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentinized peridotite and cemented sandstone; dense; damp.
		28		3			@4.5-5': weakly to deeply weathered; soft to hard serpentinite and serpentinized peridotite.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger-cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BB2-10

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/02/86

SURFACE ELEV. 114'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		20			1	SP	ASPHALT AND GRAVEL-FILL
		32*			2	GC	SAND-FILL; dark brown (10YR, 4/3); 5% low-plasticity fines; 95% fine to medium sand; medium dense; dry to damp.
		40			3		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 30% low- to moderate-plasticity fines; 20% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentinized peridotite, chert, and cemented sandstone; dense; damp.
					5		BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BB2-11

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/02/86

SURFACE ELEV. 114'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100		h	1	SP	ASPHALT AND GRAVEL-FILL
		16*	s,m,a		2		GRAVELLY SAND-FILL; dark brown (10YR, 4/3); 5% low-plasticity fines; 60% fine to coarse sand; 35% fine and coarse gravel; clasts are hard and consist of serpentinized peridotite, cemented sandstone, and chert; some oil staining; solvent odor; very dense; damp.
		20			3	CL	SANDY CLAY-FILL; dark brown (10YR, 4/3); 80% low-plasticity fines; 15% fine to coarse sand; 5% fine and coarse gravel; very stiff; damp; slight solvent odor.
					5		BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04


BORING NO. BB3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/02/86

SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		35		1	CL- CH SERP		ASPHALT AND GRAVEL-FILL GRAVELLY CLAY-FILL; dark yellowish brown (10YR, 4/4); 65% moderate- to high-plasticity fines; 10% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of serpentinitized peridotite, cemented sandstone, and chert; dry.
		45*	s,m,a	2			SERPENTINITE-BEDROCK; gray (5Y, 3/1); rock consists of serpentinite and serpentinitized peridotite; soft to moderate hardness; moderately to deeply weathered.
		20		3			BOTTOM OF BORING AT 5 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BC2-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/2/86

SURFACE ELEV. 144'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100		1	SM		SILTY SAND-FILL; dark brown (10YR, 4/3); 40% low-plasticity fines; 60% fine sand; medium dense; dry.
		150*	a	2	SERP		SERPENTINITE-BEDROCK; gray (5Y, 3/1); rock consists of serpentized per- idotite; hard; moderately weathered.
		100		3			
				5			BOTTOM OF BORING AT 4 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04




BORING NO. BC2-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO-GRAPHIC COLUMN	DESCRIPTION
		37			1 GC		ASPHALT AND GRAVEL-FILL
		70*	s,m,a		2 SERP		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 20% low-plasticity fines; 35% fine to coarse sand; 45% fine and coarse gravel; clasts are hard and consist of cemented sandstone and serpentinitized peridotite; dense; damp.
		70			3		SERPENTINITE-BEDROCK; gray (5Y, 5/1); and black (5YR, 2.5/1); rock consists of serpentinite and serpentinitized peridotite clasts in a sheared matrix; matrix is soft to friable; deeply weathered; clasts are low hardness to hard; weakly to deeply weathered; dry.
				5			BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04



BORING NO. BC2-3

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		26		1	SM		ASPHALT AND GRAVEL-FILL
		30*		2	SERP		SILTY SAND-FILL; dark brown (10YR, 4/3); 40% low-plasticity fines; 60% fine sand; medium dense; dry.
		64		3			SERPENTINITE-BEDROCK; gray (5Y, 5/1); and black (5Y, 2.5/1); rock consists of serpentinite and serpentinized peridotite clasts in a sheared matrix; matrix is soft to friable; deeply weathered; clasts are low hardness to hard; weakly to deeply weathered; dry
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BC2-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 124'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		31			1	CL- CH	ASPHALT AND GRAVEL-FILL
		70*	a		2	SERP	SANDY CLAY-FILL; brown (10YR, 5/3); 85% moderate- to high-plasticity fines; 15% fine sand; very stiff; damp.
		90			3		SERPENTINITE-BEDROCK; gray (5Y, 5/1); rock consists of serpentinite and serpentinitized peridotite; highly fractured fractures infilled moderately weathared; low hardness to hard.
				5			
				10			
				15			
				20			

BOTTOM OF BORING AT 4.5 FEET.

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BC3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 114'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100			1	SERP	SERPENTINITE-BEDROCK; gray (5Y, 3/1);
		100*	a		2		rock consists of serpentinite and
		100			3		serpentinized peridotite; soft to
				5			moderate hardness; moderately to
							deeply weathered.
				10			BOTTOM OF BORING AT 4 FEET.
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BC3-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/26/86

SURFACE ELEV. 113' ±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55			1	SW	ASPHALT AND GRAVEL-FILL
		90*	a		2		GRAVELLY SAND-SERPENTINITE FILL; gray
		100			3		(5Y, 5/1); 5% low-plasticity fines;
				5			60% fine to coarse sand; 35% fine
							and coarse gravel; clasts are soft to
							hard and consist of serpentinite and
							serpentinized peridotite; weakly to
							deeply weathered; dense to very
							dense; dry to damp.
							BOTTOM OF BORING AT 4 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BC3-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 112' ±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		43			1	GC	ASPHALT AND GRAVEL-FILL
		90*	a		2		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 3/4) and very dark gray (5Y, 3/1); 20% low-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, cemented sandstone, quartz diorite, and chert; dense to very dense; dry to damp.
		200			3		BOTTOM OF BORING AT 4 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04


BORING NO. BC4-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SWK DATE 11/25/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		30		1	GC		ASPHALT AND GRAVEL-FILL CLAYEY GRAVEL-FILL; very dark gray (5Y, 3/1); 15-30% low-plasticity fines; 15-30% fine to coarse sand; 55% fine and coarse gravel; clasts are soft to hard and consist of serpentinite and serpentinitized peridotite; weakly to deeply weathered; medium dense to dense; dry to damp.
		39*	a	2			
		47		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BC4-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		122		1	SW		SANDY GRAVEL-FILL; dark brown (10YR, 3/3); 5% low-plasticity fines; 40% fine to coarse sand; 55% fine gravel; dense to very dense; dry.
		25 *	a	2	CL		SILTY SAND-FILL; dark brown (10YR, 3/3); 20-45% low-plasticity fines; 50-75% fine sand; 5% fine gravel; medium dense; dry.
		37		3			GRAVELLY CLAY-FILL; dark yellowish brown (10YR, 3/4); 55% low- to moderate-plasticity fines; 20% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of serpentinized peridotite, chert, and cemented sandstone; very stiff; damp. @4.5-5': medium sand layer.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BD4-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/24/86

SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO-GRAPHIC COLUMN	DESCRIPTION
		47			1	SP	ASPHALT AND GRAVEL-FILL
		33*	a		2	SC-SW	SAND-FILL; dark brown (10YR, 3/3); <5% low-plasticity fines; 90% fine to medium sand; 5% fine gravel; dense; damp.
		35			3		CLAYEY SAND TO GRAVELLY SAND-SERPENTINITE FILL; gray (5Y, 5/1); 5-15% low-plasticity fines; 60% fine to coarse sand; 25-35% fine and coarse gravel; clasts are soft to hard and consist of serpentinite and serpentinized peridotite; weakly to deeply weathered; dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. 8D4-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 112'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		100<			1	GP	SANDY GRAVEL-FILL; gray (5Y, 3/1); <5% low-plasticity fines; 40% fine to coarse sand; 55% fine gravel; dense; dry.
		60*	a		2	SC-SW	@1.5': metal; flakes.
		34			3		CLAYEY SAND TO GRAVELLY SAND-SERPENTINITE FILL; gray (5Y, 5/1); 5-20% low-plasticity fines; 60% fine to coarse sand; 20-35% fine and coarse gravel; clasts are soft to hard and consist of serpentinite and serpentinitized peridotite; weakly to deeply weathered; very dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE2-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/1/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		80			1	GC	ASPHALT AND GRAVEL-FILL
		100*	a		2		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/6); 20% low-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, chert, quartz diorite, and basalt; very dense; damp.
		70			3		
				5			BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE2-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/03/86

SURFACE ELEV. 110' ±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		65			1	GW	ASPHALT AND GRAVEL-FILL
		70 *	a		2		SANDY GRAVEL-FILL; dark brown (10YR, 4/3); 5% low-plasticity fines; 35% fine to coarse sand; 60% fine and coarse gravel; clasts are hard and consist of cemented sandstone, quartz, and serpentized peridotite; very dense; dry to damp.
		100			3		BOTTOM OF BORING AT 4 FEET.
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 108'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		34			1	CL	ASPHALT AND GRAVEL-FILL
		36 *	a		2		GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 60-75% low- to moderate-plasticity fines; 15% fine to coarse sand; 15-25% fine and coarse gravel; 5% shell fragments; clasts are hard and consist of serpentized peridotite and chert; hard; dry to damp.
		80			3	SC	CLAYEY SAND-FILL; gray (5Y, 5/1); 15-20% low-plasticity fines; 60% fine to coarse sand; 20-25% fine and coarse gravel; clasts are hard and consist of serpentized peridotite and chert; very dense; damp.
				5			BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE3-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 107'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		80			1	GC	ASPHALT AND GRAVEL-FILL
		41*	a		2		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 20% low-plasticity fines; 20% fine to coarse sand; 60% fine and coarse gravel; clasts are hard and consist of serpentized peridotite and cemented sandstone; very stiff to hard; damp.
		38			3		@2': occasional sandy clay pockets.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE3-3

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 110' ±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		49			1	GC- GW	CLAYEY GRAVEL TO SANDY GRAVEL-FILL; dark yellowish brown (10YR, 4/4) and gray (5Y, 5/1); 5-30% low-plasticity fines; 20% fine to coarse sand; 50- 75% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, cemented sandstone and chert; very dense; dry to damp.
		110*	a		2		
		130			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE3-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		36			1	CL	ASPHALT AND GRAVEL-FILL
		55 *	a		2		GRAVELLY CLAY-FILL; very dark gray (5Y, 3/1); 60% low- to moderate-plasticity fines; 15% fine to coarse sand; 25% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, cemented sandstone and chert; very stiff; damp.
		150			3		@1.5': 6" sandy silt layer.
				5			@2': dark brown (10YR, 3/3).
							BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE3-5

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		60			1	GC- GW	CLAYEY GRAVEL TO SANDY GRAVEL-FILL; dark yellowish brown (10YR, 4/4); 5- 20% low-plasticity fines; 20% fine to coarse sand; 60-75% fine and coarse gravel; clasts are hard and consist of chert, serpentinized peridotite, and claystone; very dense; dry to damp.
		100 *	a		2		
		38			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BE3-6

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55			1	GC	ASPHALT AND GRAVEL-FILL
		100*	s,m,a		2		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 6/4); 20% low-plasticity fines; 35% fine to coarse sand; 45% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, cemented sandstone and chert; very dense; dry to damp.
		73			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF2-1

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55			1	GC	ASPHALT AND GRAVEL-FILL
		45 *	a		2		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/6); 20% low-plasticity fines; 35% fine to coarse sand; 45% fine and coarse gravel; clasts consist of serpentized peridotite, cemented sandstone and chert; dense; dry.
		23			3		@4': medium dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF2-2

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		75			1	GC	ASPHALT AND GRAVEL-FILL
		90 *	s,m,a		2		CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/6); 20% low-plasticity fines; 30% fine to coarse sand; 50% fine and coarse gravel; clasts are hard and consist of chert, cemented sandstone and serpentinized peridotite; very dense; dry.
		70			3		@1.5': 6" sandy gravel layer.
				5			BOTTOM OF BORING AT 4.5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		54			1	GC	CLAYEY GRAVEL-FILL; gray (5Y, 5/1); 15% low- to moderate-plasticity fines; 20% fine to coarse sand; 65% fine and coarse gravel; clasts consist of hard serpentized peridotite and cemented sandstone; very dense; dry. SANDY GRAVEL-FILL; dark brown (10YR, 3/3); 5% low-plasticity fines; 30-40% fine to coarse sand; 55-65% fine gravel; clasts consist of hard serpentized peridotite and cemented sandstone; very dense; dry. BOTTOM OF BORING AT 4.5 FEET.
		95*		a	2	GP	
		66			3		
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface with concrete. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-2

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 111'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		50			1 GP		SANDY GRAVEL-FILL; light brownish gray (10YR, 6/2); 5% low-plasticity fines; 30% fine to coarse sand; 65% fine and coarse gravel-size, friable to hard, gneissic rock fragments; very dense; dry. CLAYEY GRAVEL-SERPENTINITE FILL; dark yellowish brown (10YR, 3/4) and very dark gray (5Y, 3/1); 15% low-plasticity fines; 20-30% fine to coarse sand; 55-65% fine and coarse gravel; clasts consist of friable to hard, weakly to deeply weathered serpentinite and serpentinized peridotite; very dense; damp; BOTTOM OF BORING AT 4.5 FEET.
		75*	a		2 GC		
		80			3		
				5			
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-3

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO-GRAPHIC COLUMN	DESCRIPTION
		46			1	GP	SANDY GRAVEL-FILL; dark brown (10YR, 3/3); 5% low-plasticity fines; 30% fine to coarse sand; 65% fine gravel; clasts consist of hard serpentized peridotite and cemented sandstone; dense to very dense; dry. @1-1 3/4': fine to medium sand layer. @4-4 1/2': fine sand layer.
		75 *	a		2		
		74			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-4

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 116'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		62			1	SW	GRAVELLY SAND-FILL; light brownish gray (10YR, 5/2); 5% low-plasticity fines; 60% fine to coarse sand; 35% fine and coarse gravel; clasts consist of friable to hard gneissic rock fragments, serpentized peridotite, and cemented sandstone; dense to very dense; dry. @4': medium dense.
		41*	a		2		
		21			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-5

PROJECT NAME HPNS-ASBESTOS STUDY

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SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO-METER (TSF)	PENETRA-TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		40			1	GP	SANDY GRAVEL-FILL; brown (10RY, 5/2); 5% low-plasticity fines; 35% fine to coarse sand; 65% fine and coarse gravel; dense; dry. SAND-FILL; dark brown (10YR, 5/3); 5% low plasticity fines; 90% fine to medium sand; 5% coarse sand; medium dense; dry to damp.
		31*	a		2	SP	
		28			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-6

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		67			1	GC	ASPHALT AND GRAVEL-FILL
		85*	a		2	GP	CLAYEY GRAVEL-FILL; dark brown (10YR, 5/3); 20% low-plasticity fines; 25% fine to coarse sand; 55% fine and coarse gravel; clasts are hard and consist of serpentized peridotite and cemented sandstone; very dense; dry.
		29			3		SANDY GRAVEL-FILL; dark brown (10YR, 5/3); 5% low-plasticity fines; 40% fine to coarse sand; 55% fine and coarse gravel; clasts as above; dense; dry.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-7

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 113'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		80		1	1	GC	CLAYEY GRAVEL-FILL; dark brown (5Y,5/1); 15% low-plasticity fines; 20-30% fine to coarse sand; 55-65% fine and coarse gravel; clasts are hard and consist of serpentized peridotite, chert, and cemented sandstone; very dense; dry.
		100*	a	2	2		
		41		3	3	SW-SC	GRAVELLY SAND TO CLAYEY SAND-SERPENTINITE-FILL; very dark gray (5YR, 3/1); 5-15% low-plasticity fines; 55% fine to coarse sand; 30-40% fine and coarse gravel; clasts are soft to hard, weak to deeply weathered serpentinite and serpentized peridotite; dense to very dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

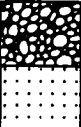
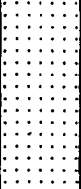
BORING NO. BF3-8

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 11/25/86

SURFACE ELEV. 110'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		42		1	GW		SANDY GRAVEL-FILL; brown (10YR, 5/3); 5% low-plasticity fines; 35% fine to coarse sand; 60% fine and coarse gravel; dense; dry.
		37*	a	2	SP		SAND-FILL; brown (10YR, 5/3); 5% low-plasticity fines; 90% fine sand; 5% fine gravel; medium dense to dense; @ 2.5': 10% shell fragments.
		28		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-9

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/01/86

SURFACE ELEV. 108'±

PHOTO-VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		55			1	GC	CLAYEY GRAVEL-FILL; dark yellowish brown (10YR, 4/6); 25% low-plasticity fines; 35% fine to coarse sand; 45% fine and coarse gravel; clasts are hard and consist of chert, cemented sandstone, and serpentized peridotite; dry.
		63*	s,m,a		2	SP	@2': 1' sandy gravel layer.
		29			3		SAND-FILL; gray (10YR, 5/1); 5% low-plasticity fines; 85% fine sand; 10% medium to coarse sand; medium dense; damp.
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BF3-10

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/01/86

SURFACE ELEV. 110'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		45			1	GW- GM SP	SANDY GRAVEL TO SILTY GRAVEL-FILL; dark brown (10YR, 5/3); 5-15% low-plasticity fines; 30% fine to coarse sand; 55-65% fine and coarse gravel; dense; dry.
		65*	a		2		SAND; gray (10YR, 5/1); 5% low-plasticity fines; 85% fine sand; <5% fine gravel; 1-2% shell fragments; medium dense; damp.
		36			3		
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 365-02.04

BORING NO. BG3-1

PROJECT NAME HPNS-ASBESTOS STUDY

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BY SK DATE 12/01/86

SURFACE ELEV. 112'±

PHOTO- VAC (ppm)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
		33		1	GP SP	° ° °	SANDY GRAVEL-FILL
		27*	s,m,a	2			SAND-FILL; gray (10YR, 5/1); 5% low-plasticity fines; 85% fine sand; 5% coarse to medium sand; <5% fine gravel; 1-2% shell fragments; medium dense; dry to damp.
		19		3			
				5			BOTTOM OF BORING AT 5 FEET.
				10			
				15			
				20			

REMARKS

Drilled with 5-inch continuous-flight auger; * denotes 2.5-inch O.D. split-spoon sampler; all others sampled with a 3-inch O.D. split-spoon sampler. Boring was backfilled with auger cuttings to 3/4-foot, concrete to surface. Surface elevation is relative to Navy datum.

Appendix D
GALSON ASBESTOS REPORT

**Summary Report:
Survey for Asbestos Materials**

at the

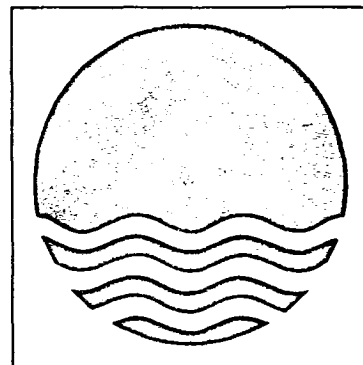
**Hunters Point Naval Shipyard
San Francisco, California**

Galson Project # S6-518
November - December, 1986

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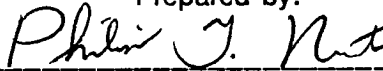
Summary Report:
Survey for Asbestos Containing Materials
at

Hunters Point Naval Shipyard
Department of the Navy
San Francisco, California

November - December 1986

Galson Project #S6-518

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EXECUTIVE SUMMARY

This report summarizes the results of a site inspection for asbestos containing materials (ACM) at the Hunters Point Naval Shipyard, Department of the Navy, San Francisco, California. This site was evaluated for the presence of ACM on the soil surface and to a soil depth of 5 feet. Asbestos was confirmed in 35 out of 47 surface materials found across the site. 107 subsurface soil samples were collected; 8 were positive for man-made ACM and 69 for measurable or trace quantities of naturally occurring asbestos minerals. The potential health hazards associated with soil excavation are discussed, and recommended practices for the protection of workers is briefly discussed. Proposed abatement procedures are presented to mitigate the asbestos hazard.

This report includes a discussion of:

- the survey procedure,
- sampling and analytical methods,
- laboratory and survey results,
- potential health hazards, and
- proposed abatement phases.

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1.0 INTRODUCTION

This preliminary inspection to verify the presence of both naturally occurring and friable man-made forms of asbestos containing materials (ACM) was conducted at the Hunters Point Naval Shipyard, Department of the Navy, San Francisco, California. It was performed at the request of Alex Dong, Environmental Operations Section Manager, Department of the Navy, San Bruno, California. Philip Numoto, Certified Industrial Hygienist of Galson Technical Services, Inc., Oakland, California (GALSON), conducted the survey from November 13, 1986 through December 5, 1986. He was assisted by Daryl Jahn, Industrial Hygiene Technician of Galson Technical Services, Inc.

This survey represents one phase of a comprehensive study conducted by EMCON Associates, San Jose, California (EMCON) to verify hazardous wastes at Hunters Point. GALSON served as a sub-contractor to EMCON. Steve Krcik served as the Site Coordinator and Field Geologist for EMCON.

2.0 BACKGROUND INFORMATION

The Hunters Point Naval Shipyard site has been an active ship construction and repair yard since the onset of World War II. This site has housed shipbuilding facilities and presently provides maintenance and renovation services. Shipboard activities as well as support group activities have required varied construction and renovation projects at this site on an intermittent basis over the years. Currently, construction projects are being scheduled to re-establish this site as an active naval facility.

Past activity has been accompanied by demolition of buildings, ship equipment repair and replacement, and the disposal of waste. Procedures and locations for waste disposal have not been well documented, so it is suspected that this site may be contaminated with materials classified as hazardous wastes under current United States Environmental Protection Agency and California Department of Health Services regulations.

The purpose of the GALSON study was to determine the presence or absence of possible asbestos contamination on the soil surface and to a soil depth of 5 feet and to identify the location of the contaminant. The following information was provided by the Department of the Navy:

1. No complete records regarding the possible distribution of waste deposition sites were available for the areas investigated in this study. It is known that shipbuilding and repair has occurred on-site and that asbestos containing material (ACM) waste was generated and disposed of. Fill materials that may contain contaminants were introduced to the southwest portion of the site along the bay. A random distribution of ACM waste should be assumed.

2. Portions of the Hunters Point site were identified as Areas A and B by the U. S. Department of the Navy. Areas designated as A are the primary sites for planned upcoming construction and were designated for a detailed study. Areas designated as B are secondary sites for which general data was gathered to facilitate future project planning. A less detailed study was designated for these latter areas. This project represents an effort to identify ACM deposits that could present a potential health hazard if uncovered and handled without the implementation of procedures that prevent further distribution.

3. Serpentinite bedrock formations are a natural part of the geology of this geographic region. Since chrysotile asbestos can be a constituent of serpentinite, it is suspected that chrysotile may be a natural component of soil and excavated rock, which were used as fill material at Hunters Point. Although rock and soil are generally classified as non-friable materials, this exposed fill has been subject to weathering and crushing during handling which may have exposed friable chrysotile asbestos to create a potential health hazard.

4. The primary goal of this study was to evaluate the presence of friable man-made ACM that was introduced by construction and demolition activities. Some examples of man-processed asbestos containing products are pipe lagging, tank and boiler insulation, asbestos cloth, and transite board. The sampling strategy was designed to address soil conditions to a depth that is representative of the soil layer that will be impacted by

construction activities such as foundation excavation, utility line installation, road building, etc. A depth of 5 feet was established to meet this concern.

To establish the presence or absence of asbestos was the defined goal of this study. Therefore, it was not necessary to:

- establish the depth at which suspect ACM was found, or
- accurately quantitate any materials encountered.

Geologic inventories of the San Francisco Bay Area including the Hunters Point site have been compiled by the U. S. Geologic Survey and indicate that rock formations contain serpentinite. Serpentinities consist of mixtures of serpentine minerals in various proportions, and the serpentine mineral group consists of three minerals: chrysotile, antigorite, and lizardite. Since serpentine is indigenous and contains chrysotile in mineral form, it is reasonable to assume that chrysotile asbestos will be present as a naturally occurring component of rock and fill materials. See Appendix I for a more detailed discussion of Asbestiform Mineralogy.

Asbestos has been identified as potentially hazardous if airborne exposure to respirable fibers occurs. The degree of hazard is contingent on several factors such as the concentration of airborne fibers, fiber length, susceptibility of the exposed person to asbestos related diseases, and work practices used in handling asbestos. To protect workers, both the Federal Occupational Safety and Health Administration (OSHA)¹ and California Department of Industrial Relations,

¹ Federal Occupational Safety and Health Asbestos Regulations, 29 CFR 1910.1001 as revised by 51 FR 22733, June 20, 1986.

Division of Safety and Health (CAL/OSHA)², have defined permissible exposure limits for airborne asbestos dust exposures and required work practices to minimize dust generation. The U. S. Environmental Protection Agency (EPA) has outlined recommended practices for handling asbestos and conducting asbestos removal projects³, and regulates asbestos waste disposal⁴. To protect the public welfare, the California Department of Health Services, Hazardous Waste Management Division (DOHS), regulates the packaging⁵, transport⁶, and disposal of waste asbestos⁷.

² California Occupational Safety and Health Asbestos Regulations, Title 8 California Administrative Code Section 5208.

³ Guidance for Controlling Asbestos-Containing Materials in Buildings, June 1985 Edition, U. S. Environmental Protection Agency, Publication EPA 560/5-85-024.

⁴ U. S. Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants Asbestos Regulations, 40 CFR 61, Subpart M.

⁵ California Department of Health Services Requirements for Generators of Hazardous Waste, Title 22 California Administrative Code Section 66504.

⁶ California Department of Health Services Requirements for Transporters of Hazardous Waste, Title 22 California Administrative Code Sections 66530 to 66564.

⁷ California Department of Health Services Hazardous Waste Regulations, Title 22 California Administrative Code Sections 66001 to 67651.

3.0 SURVEY PROCEDURE

EMCON held the primary responsibility for determining the location where soil samples would be collected, contracting with a driller to drill the test holes, and recording soil characteristics in accordance with standard geologic terminology. The details of this procedure, which are discussed in the EMCON report, can be summarized as follows:

1. A random distribution of asbestos contamination was assumed; hence, a sampling protocol was developed so that all locations received an equal chance of evaluation. Sites A and B were divided into a uniform square grid pattern. A 200 foot grid spacing was selected for Area A, which was scheduled for the more rigorous evaluation, and a 400 foot grid spacing was selected for Area B, which was scheduled for the less rigorous evaluation. This resulted in a total of 103 total sample locations; 59 were allocated to Area A and 44 to Area B. Samples were collected at the center of the identified grid area. Sample locations were cleared with the Navy, and in some cases, alternative sampling locations were necessary to accommodate restricted areas, utility lines, and other obstructions. See the EMCON report for exact sample locations.
2. Sample locations were identified using the utility map quadrant designation and a consecutive numbering sequence within the quadrant for each sample. This identification scheme was incorporated into records compiled by Galson. See the EMCON report for the identification of sample locations.
3. Five foot deep exploratory borings were drilled under the direction of the EMCON field geologist by Bay Land Drilling. Each boring was continuously sampled using

conventional split spoon samplers, and a log of each exploratory boring was prepared by the geologist. See the EMCON report for detailed drilling, soil logging, and sampling procedures as well as complete soil logs.

GALSON sampled and analyzed suspect ACM and minerals on the surface and in the soil samples. Sampling procedures are discussed in Sections 3.1 and 3.2, and laboratory analytical procedures are presented in Section 4.0.

3.1 Surface Sampling

GALSON inspected designated study Areas A and B for suspect ACM on the ground surface as follows:

1. Designated Areas A and B were inspected utilizing a random walk pattern and suspect materials were collected. At the request of the Department of the Navy personnel at Hunters Point, the industrial landfill site along the western shoreline of the site was also surveyed. Additional emphasis was placed on known fill sites, piles of debris, building foundations that contained scattered debris, and exposed pipe lines. Both Lieutenant Scott Leroy and Bob Soaries, Department of the Navy, assisted the GALSON industrial hygienist in identifying known locations where asbestos containing materials had been previously found. A total of 47 surface samples were collected and their locations are shown on the drawing entitled "Surface Samples - Surface Sample Locations for Asbestos Containing Materials in Areas A and B".

2. For friable ACM, a representative sample was collected by combining three sub-samples (where feasible) of each type of suspect material. Friable materials identified at Hunters Point included pipe lagging, packing material on fittings, and tank insulation.
3. Single samples of non-friable suspect surface materials were collected. Examples include transite shingles and floor tile.
4. The hypothetical type of ACM was noted in the "Description/Comments" section of the field data sheet, "Bulk Sample Log for Asbestos Containing Materials", and sampling locations were identified on a site map.
5. Samples were submitted to the GALSON laboratory for analysis.

3.2 Soil Sampling

GALSON only evaluated designated Areas A and B for the presence/absence of subsurface ACM. The protocol was not designed to quantitate the asbestos content in the soil. The soil samples described previously were inspected as follows:

1. The soil samples were inspected by the GALSON industrial hygienist. Obvious fibrous materials, sand which may have been used in sandblasting, and gray or white colored crystalline appearing minerals were specifically selected. If no obvious ACM was apparent, then sub-sets of the soil core were collected and the soil homogenized.

In general, only one sample was collected from each core regardless of its heterogeneity. Constituents of interest were specifically selected so that a skewed sample resulted; therefore, the results should only be used as qualitative data to identify the presence or absence of asbestos. An additional sample was collected if readily observable suspect material was observed in the core sample. 62 total soil samples were collected from the 59 soil borings in Area A, and 45 samples from the 44 soil borings in Area B.

2. Pertinent information was recorded on the GALSON field data log, "Bulk Sample Log for Asbestos Containing Materials". The sample description included any suspect man-made material, the presence of serpentine minerals, and any apparent fibrous materials. If no obvious materials were present, then a qualitative description of the sample was recorded. For a soil characterization, soil logs developed by the EMCON geologist should be reviewed. Appendix IV of this report presents observation by the GALSON industrial hygienist.

3. EMCON provided a Hunters Point site map to Galson that illustrated the study areas as well as the approximate location of each exploratory boring and its corresponding identification number. This unique EMCON identification system was used in GALSON's sampling protocol.

4. Soil samples were delivered to the GALSON laboratory for analysis.

3.3 Air Sampling

Since potential controversy exists regarding the health hazards posed by asbestos on the site, air samples were collected to measure current ambient asbestos fiber concentrations. Air samples were taken as follows:

1. One area sample was collected on 3 different days on the EMCON survey vehicle for total of 3 samples. This vehicle was sometimes parked upwind and sometimes downwind of both the drilling operation, which could uncover buried ACM, and sources of suspect ACM on the surface of the soil. This should provide a representative determination of the ambient levels on this site.
2. Samples were collected in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7400. Air was sampled on a 25 millimeter diameter mixed cellulose ester filter housed in an open faced cassette with cowl. The flowrate was 2.0 liters per minute of air for a time duration of 6 to 7 hours. A summary of the method is available in Appendix II.
3. Samples were submitted to the GALSON laboratory for analysis.

4.0 LABORATORY ANALYTICAL METHODS

Bulk surface samples were analyzed by polarized light microscopy and dispersion staining in accordance with the recommended method published by the U. S. Environmental Protection Agency (EPA): "Tentative Method for the Determination of Asbestiform Minerals in Bulk Samples By Polarized Light Microscopy". This analysis distinguishes between asbestos and other fibrous and non-asbestos materials. A more detailed summary of the laboratory analytical method is contained in Appendix II.

Soil samples were also analyzed by the EPA analytical method noted above. ACM source interpretations were based upon the following criteria: natural chrysotile was associated with rock fragments and mineral deposits; man-processed asbestos was associated with insulation, mineral wool, plaster, and cellulose. A more detailed discussion of the laboratory analytical criteria is contained in Appendix II in a document entitled "Lab Report: Background Information and Analytical Criteria for Distinguishing Between Natural and Man-Processed Asbestos Materials".

Air samples were collected and analyzed in accordance with the NIOSH Method #7400 supplemented by polarized light microscopy for fiber identification.

5.0 SURVEY RESULTS AND DISCUSSION

Data gathered during this survey are presented in the Appendices. The information is organized as follows:

Appendix III - Surface Sample Log and Results (tables include surface material description and laboratory results)

Appendix IV - Soil Sample Log and Results (tables include soil description and laboratory results)

Appendix V - Laboratory Data Sheets (appendix includes laboratory reports for air and bulk samples)

Appendix VI - Field Data Sheets (appendix includes field records for air and bulk samples)

Drawing: Surface Samples - Surface Sample Locations For Asbestos Containing Materials in Areas A and B (shows locations where trace and detectable asbestos were found)

Drawing: Soil Samples - Soil Sample Locations For Asbestos Containing Materials in Areas A and B (shows locations where trace and detectable asbestos were found)

5.1 Data Interpretation: Qualitative vs. Quantitative Results for Asbestos

The goals of this study were to detect the presence or absence of asbestos on the surface and in soil to a depth of 5 feet. In addition, the origin of the detected ACM was established. To achieve these goals, soil was collected with specific emphasis given to readily visible suspect material; consequently, the sample composition was heavily weighted based upon the professional opinion of the Certified Industrial Hygienist who was assisted by the EMCON geologist. The soil compositions reported by the laboratory are probably not representative of the true soil composition on this site and represent a worst case estimation of the asbestos soil content.

The DOHS hazardous waste regulations define asbestos as a material that contains more than 1 per cent asbestos, and when the asbestos content exceeds this level, the material is subject to

DOHS hazardous waste regulations. The soil data generated by this study exceeds 1 percent in many cases but these values are not representative of the true concentration since the sampling strategy was designed to generate qualitative data.

For surface samples, representative rather than weighted samples were collected. Any materials that contain more than 1 percent asbestos are subject to regulation by DOHS, and workers who handle them must perform work in accordance with CAL/OSHA regulations.

5.2 Air Sampling Results

Three ambient air samples were collected on 3 different days from the bed of the EMCON survey vehicle as previously discussed. The reported air concentrations were less than 0.004 fiber/cc (95% confidence interval is +/- 0.002 fiber/cc) in each case. Additional analyses of the observed fibers indicated that few, if any, fibers were identifiable as asbestos. These measurements were more than one order of magnitude below the current CAL/OSHA Action Level of 0.10 fiber/cc. They also fall below the maximum level recommended by the EPA of 0.010 fibers/cc for reoccupancy of buildings after asbestos has been removed from the indoor building environment. These standards were established by the regulatory agencies to safeguard most employees and members of the public from the risk of contracting asbestos related disease.

The results were representative of the conditions at the time of the field survey. The only major activity ongoing in the vicinity of the sampling equipment was drilling to gather the necessary soil core samples, and the collected soil samples contained some moisture so fiber release would have been minimal. Significantly different results may occur if cleanup of dry

surface debris and/or excavation of dry contaminated soil are conducted and generate dust.

Exposures should be minimal provided materials are handled in a damp state.

5.3 Surface Sampling Results

The sample log including laboratory results is presented in Appendix III. Laboratory results and field data sheets are presented in Appendices V and VI, respectively. Locations are shown on the Drawing, "Surface Samples: Surface Sample Locations For Asbestos Containing Materials in Areas A and B".

The laboratory results for 35 out of 47 total surface samples contained measurable or trace quantities of asbestos. The positive and trace locations are indicated on the Surface Sample Drawing. The hypothesized identity of the ACM with positive laboratory confirmation included:

- coarse insulated woven cloth,
- some (but not all) wall materials,
- some (but not all) floor tiles,
- pipe lagging, and
- wet packed materials used on pipe fittings.

ACM was found in specific areas rather than being randomly distributed over the site. These areas are discussed in Section 5.5.

5.4 Soil Sampling Results

The field sample log, including laboratory results, is presented in Appendix IV. Laboratory results are presented in Appendix V and field data sheets are presented in Appendix VI. , and locations are shown on the Drawing, "Soil Samples: Soil Sample Locations For Asbestos Containing Materials in Area A and B".

In Area A, 62 samples were collected. The sample results are summarized below:

	<u>Asbestos</u>	<u>Trace (<1%)</u>	<u>Non-asbestos</u>
Area A Borings	30	15	17

Of 30 positive samples, 27 contained naturally occurring chrysotile mineral asbestos and 3 contained man-made ACM. Natural asbestos was randomly and widely distributed. Positive and trace samples and their locations are identified on the Soil Sample Drawing.

In Area B, 45 samples were collected. The distribution of sample results is summarized below:

	<u>Asbestos</u>	<u>Trace (<1%)</u>	<u>Non-asbestos</u>
Area B Borings	19	5	21

The 19 asbestos containing samples contained man-made ACM in 5 cases and naturally occurring chrysotile mineral asbestos in 14 cases. Indigenous chrysotile asbestos was again randomly and widely distributed. Positive and trace samples and their locations are identified on the Soil Sample Drawing.

5.5 General Locations That Contain ACM

Both man-made and natural ACM were identified in various locations within the designated survey boundaries. For discussion purposes, Areas A and B of the Hunters Point study site were divided into four Regions that are illustrated on the Surface Samples and Soil Samples Drawings. The findings for each Region are discussed below:

1. Region I: Industrial Landfill. (Description: This space served as a hazardous waste landfill site and occupies the western shoreline of the Hunters Point site. It is bordered by "J" Street on the southeast and by Spear Avenue on the northeast.) Only surface samples were collected in this Region.

This Region was targeted for exploratory soil borings by EMCON under a separate contract to determine the existence of buried hazardous wastes so soil borings for evaluation by GALSON were not scheduled under this project. However, at the request of the Department of the Navy, surface samples were collected under this study. Of the 17 surface samples, 10 contained asbestos, 1 contained trace levels, and the remaining 6 were negative. Identifiable materials included pipe lagging, transite shingles, and general debris. Insulated pipes and general asbestos containing debris were observed to be intermixed with other waste construction materials: concrete blocks with reinforcement bars, bare piping, and wall materials. It should be assumed that additional ACM is buried with construction waste throughout this landfill area.

2. Region II: Scrap Yard-Spear Avenue-"I" Street-"J" Street. (Description: This area is bordered by "I" Street on the east, and "J" Street on the west, Spear Avenue on the

northwest and includes the Scrap Yard and area north of this yard.) Both surface samples and soil borings were collected.

Twelve surface and 49 soil samples were collected in this area. The distribution and asbestos content are summarized as follows:

	<u>Asbestos</u>	<u>Trace (<1%)</u>	<u>Non-asbestos</u>
Surface	10		2
Area A Borings	26	11	5
Area B Borings	3	2	2

Surface samples were collected in the north half of this area in the vicinity of Spear and 6th Avenues and in the Scrap Yard. The surface contamination was readily visible: lagging debris was randomly scattered in this area, waste magnesia bags were stacked in the yard, and the scrap yard was highly contaminated with pipe lagging and tank insulation debris.

The 29 positive soil samples were randomly and widely distributed across the study Areas. Twenty six contained naturally occurring asbestos and man-made materials were present in 3 locations: AD4-5, AD4-17, and AE4-12. Of the 3 samples, only AD4-5 contained material that was readily identified as suspect man-made material at the time of sampling; therefore, it can be concluded that the man-made material was not readily apparent.

There was no correlation between the distribution of man-made ACM on the surface and man-made material buried in soil. Similarly, no correlations between distribution of man-made and naturally occurring ACM existed.

3. Region III: Manseau Street, "H" Street, and "I" Streets. (Description: The area is bordered by "J" Street on the west, shorelines and piers to the south and east, and Manseau Street on the north. In addition, 5 locations just north of Manseau are discussed for this area.) Surface samples and Area A and B borings were evaluated.

Fifteen surface and 42 soil samples were collected in this area. The distribution and asbestos content are summarized as follows:

	<u>Asbestos</u>	<u>Trace (<1%)</u>	<u>Non-asbestos</u>
Surface	13		2
Area A Borings	4	4	12
Area B Borings	3	3	16

Within this study site is a sub-area bordered by Manseau on the north, Hussey Street on the east, Mahan Street on the south, and "J" Street on the west where the following exist: a steam generating plant, the accompanying steam distribution lines, building foundations, and waste debris remaining from building demolition. Building foundations and the soil immediately adjacent were littered with residual waste: plaster, pipe lagging, one foot square floor tiles, transite shingles, tar paper, and other unidentifiable fragments. All 15 surface samples were collected in this sub-area, and 13 out of the 15

surface samples were positive. It should be assumed that inconspicuous, fine surface contamination accompanies the visible suspect ACM in this area.

Steam lines set in below grade concrete trenches were also investigated in this area, and the single representative sample of pipe insulation was found to contain asbestos. It is reasonable to assume that the entire steam distribution system has been insulated with asbestos containing pipe lagging. Although no samples were taken in the steam generation plant, it should also be assumed that all steam generation equipment is insulated with asbestos. Lieutenant Scott Leroy reported that this facility is presently insulated with the original specified materials and that no removal or renovation has been performed.

Again, asbestos in soil samples was from a natural source and was widely distributed over both Areas A and B. Man-made asbestos material was present at only one location, BF3-1, so no correlation existed between surface and soil contamination.

4. Region IV: North Berth Area. (Description: This area occupies the northeast portion of the Hunters Point site and is generally northwest of Galvez Avenue, but also includes the hillside north of Fisher Avenue. The shoreline defines its north and east borders.) Only surface and Area B soil borings were collected.

Three surface and 16 soil samples were collected in this area. The distribution and asbestos content are summarized as follows:

	<u>Asbestos</u>	<u>Trace (<1%)</u>	<u>Non-asbestos</u>
Surface	2	1	
Area B Borings	13		3

Two out of 3 surface samples were positive. Pipe lagging debris and abandoned steam lines were present in the vicinity of abandoned Dry Docks 6 and 7, and each was confirmed to contain ACM. The sample of suspect material found on the beach contained only trace amounts of ACM. Although the result was negative for the sample analyzed, the presence of suspect ACM suggests that materials may have drifted onto the beach or may reflect incomplete burial of waste and debris in the vicinity of the dry docks.

Significant soil contamination was identified in this region. Asbestos was confirmed in 13 out of 16 samples; therefore, it apparently exists uniformly throughout this portion of Hunters Point. The ACM was from natural sources in 9 cases and was man-made in 4 cases.

The man-made ACM was present in soil samples BB2-3, BB2-7, BB2-10, and BB2-11. These 4 locations are the perimeter cores located along the shoreline in the vicinity of Berths 60, 59, 58, 57, 56, and 55 and are 100 to 200 feet from the shoreline. Fill material contaminated with asbestos may have been deposited along the shoreline, or asbestos may have been dropped on the shore during handling and transport and paved over with asphalt at a later date.

5.6 Conclusions

This asbestos assessment of the Hunters Point site has revealed a distribution of naturally occurring and man-made forms of asbestos. Based on the study design and the resulting data, the following can be concluded:

Data Interpretation

1. The sampling protocol was designed to identify the presence or absence of ACM in soil samples. Suspect soil components were specifically collected so a biased sample resulted. Quantitative data reported by the laboratory cannot be assumed to be representative.

Surface Samples

2. Visible surface samples were collected on a random walk pattern. ACM may have been missed by the random pattern used by the surveyor. Also, ACM may not have been recognizable, may have been too small to detect, or may have been concealed or camouflaged beneath other debris, ground cover, etc.

3. Surface contamination was apparently associated with specific areas where asbestos handling operations were conducted: building demolition, scrap metal processing, waste landfilling, and insulation of shipboard equipment. These areas can be crudely delineated for cleanup purposes.

Soil Samples

4. Soil samples were collected at 200 foot intervals in Area A and 400 foot intervals in Area B. Significant amounts of ACM may lie between the sampling locations.

5. Soil contamination was from both natural and man-made sources. Detectable and trace amounts of natural asbestos were identified in 45 out of 62 (73%) Area A samples and 24 out of 45 (53%) Area B samples. 52% (56 out of 107 total samples) of the soil samples contained natural asbestos mineral. This material is uniformly distributed and should be assumed to be present in all locations.

Detectable and trace quantities of man-made ACM were found in 3 out of 62 (5%) Area A cores and 5 out of 45 (11%) Area B cases. A random distribution pattern should be assumed and friable man-processed ACM may be encountered in an estimated 8% of all locations, i. e. 8 out of 107 samples.

6. Buried man-made ACM was not readily detected by visual evaluation by the trained Certified Industrial Hygienist. Asbestos contact can occur without an awareness that it has been uncovered. This limitation must be considered when feasible technical requirements for site cleanup and soil excavation are investigated and established.

6.0 HEALTH HAZARD POTENTIAL

Both man-made and naturally occurring asbestos materials have been verified at this site, but the potential health hazard that exists due to the presence of asbestos is only partially understood. Man-made materials identified at Hunters Point include both non-friable (transite pipe, transite shingles, and floor tile) and friable (pipe lagging, packing materials, and tank insulation) forms of ACM. Handling of friable ACM in the occupational setting has been studied. Physical handling generates airborne asbestos fiber concentrations in excess of safe levels, fibers have been inhaled by unprotected workers, and resulting cases of asbestosis, mesothelioma, and lung cancer are well documented. The health risk associated with handling of friable ACM can be mitigated by local exhaust ventilation, the application of water to suppress dust, and the use of appropriate respirators and other protective equipment.

The potential health effects from handling soil rich in serpentinite minerals is not well understood. Mining of pure forms of chrysotile and amosite have been reported to be the causative agent of asbestos related diseases, but the literature does not clearly show any significant health risk associated with the handling of soil containing serpentine minerals as found in San Francisco Bay Area geologic formations. Neuberger, Kundi, and Friedl investigated mortality data for an Austrian town situated amongst natural asbestos mineral deposits⁸. No statistical differences in lung and other cancer rates were detected due to environmental asbestos exposures. Similarly, Daniel Smith, an investigator with Science Applications, studied the impact of environmental exposures under a contract with the California Air Resources

⁸ Neuberger, M., Kundi, M., and Friedl, H. P. 1984. Archives of Environmental Health, Vol. 39, No. 4, July/August 1984: 261 - 265.

Board⁹. Asbestos concentrations in air and water were measured in two counties in California, Calaveras and Tuolumne, with known serpentine formations. Mortality records were gathered for lung cancer, digestive tract cancer, and hypertensive heart disease, and outdoor ambient air samples were collected at representative locations throughout both counties. Air measurements ranged from 0.00001 to 0.003 fibers/cc, but no statistically different risk of asbestos related diseases were reported.

The California DOHS is currently investigating asbestos exposures that arise from indigenous serpentine minerals, but no conclusive evidence regarding the health risk has yet been reported¹⁰. However, excavation subjects soil containing serpentine minerals to crushing, falling, and scooping that breaks soil into finer particles and permits material drying and dust generation. Workers who operate earthmoving equipment or perform manual tasks may be exposed to airborne asbestos fiber levels from natural elements that are in excess of CAL/OSHA regulations. Prudence dictates that a program of dust suppression supplemented with personal protective equipment should be implemented for all excavation.

⁹ Smith, Daniel F. 1984. Analysis of Mortality in Two California Counties With Asbestos-Bearing Serpentine Mineral Formations.

¹⁰ Personal Communication. December 1986. Alvin Leonard, Department of Health Services.

7.0 PROPOSED ABATEMENT PHASES

General phases for mitigating the potential hazard posed by asbestos at Hunters Point are cleanup of surface materials, and excavation and removal with wetting. Any abatement action must be integrated into the comprehensive plans for both asbestos and hazardous waste mitigation and management at the Hunters Point Naval Shipyard site.

7.1 Surface Contamination: Cleanup

Friable asbestos waste left on the surface presents the greatest asbestos hazard at Hunters Point. Specific spots with obvious contamination were known by the Navy, verified by Galson, and are identified in Section 5.5. Boundaries for these areas can be crudely delineated and the defined areas targeted for cleanup. All friable waste and debris (such as pipe lagging, packing materials, tank insulation, and cloth) should be gathered up, packaged in impermeable containers, and disposed of in an approved landfill. Non-friable materials (such as transite pipe and transite shingles) will not release fibers but should be collected to insure that cleanup has been complete. All work should be completed by trained workers with previous experience. Wet methods to maintain materials in a wet state during handling and complete personal protective equipment for workers should be mandatory. The general regulatory requirements discussed in Section 7.4 should serve as the minimum guidelines for the asbestos handling program.

Known activities have been conducted in some locations that have distributed ACM over the surface. These include steam pipe removal during building demolition and the operation of a Scrap Yard to salvage metal waste from ships. Since soil was visibly contaminated in the vicinity of these activities, removal of 6 inches of existing topsoil at these sites is recommended

to remove the difficult-to-see residual material, which could dry and become airborne during warmer weather conditions. The introduction of non-asbestos containing fill material could follow to restore the current soil elevation and to serve as a cap over the existing soil that may continue to bear some contamination and serpentine minerals. Attention should be given to defining criteria for designating the area as clean, especially since chrysotile is indigneous to soil and rock at this site.

A comprehensive asbestos management plan should be developed and used as a basis for a contract specification to govern waste removal. Procedures discussed in Section 7.4 should be used as minimum guidelines.

7.2 Soil Contamination: Priority Contaminant Cleanup

The asbestos investigation was part of an overall hazardous waste assessment conducted by EMCON at this site. It is expected that high priority contaminants such as polychlorinated biphenyls, gasoline, and paint solvents, which require immediate abatement action, will be mixed with asbestos waste. Any abatement for these contaminants could dictate the protective equipment, material handling, and disposal requirements; asbestos would become a secondary but important environmental concern. Abatement in priority areas should address asbestos as part of the waste mitigation plan.

7.3 Soil Contamination: Excavation and Removal

Data gathered during this investigation suggests that naturally occurring asbestos is generally present throughout the site and that man-made ACM is randomly distributed. Based on this evidence, a systematic plan to locate buried material and remove it is not possible; a

contingency plan should be implemented that outlines handling procedures that must be followed when buried man-made ACM is encountered during excavation. The protocol developed to meet the needs discussed in Section 7.1 would be appropriate. Also, dust control measures must be practiced throughout any excavation phase.

The DOHS currently has no policy that addresses the handling of soil that contains serpentine minerals including chrysotile. The DOHS is primarily interested in man-made wastes that contaminate the environment and would probably limit its concerns to man-made ACM and require that all reasonable precautions are taken to minimize dust generation during excavation.

The primary mandate for any excavation project is to implement an ongoing dust suppression program that is in effect at all times when dust could be generated. Adequate sprinkling of soil with water to prevent drying and dust generation is critical especially since chrysotile is a natural component of soil. This control measure should be supplemented with a requirement that all participants in the excavation, trenching, hauling and other material handling phases of site development wear a full complement of protective equipment. Personal air monitoring of workers who operate the excavation equipment should be conducted to monitor the effectiveness of the control measures. Perimeter air monitoring of the Hunters Point site at critical points in the vicinity of adjacent property owners is also recommended. This monitoring should be conducted throughout the duration of the project to document airborne asbestos fiber levels.

7.4 Asbestos Handling Procedures

Asbestos materials should be wet before handling to reduce fiber generation. Surface materials may contain some moisture absorbed from soil, rainfall, etc. If dry, water should be sprinkled

overnight to get this effect. Buried materials are generally wet since moisture will be absorbed from soil. Exposed soil and waste will dry upon exposure to dry air so continued sprinkling with water on an intermittent basis should be practiced.

Workers should be protected based upon criteria mandated under the proposed CAL/OSHA asbestos regulations. A complete worker protection program would include appropriately selected respirators and fit testing, protective clothing, shower facilities and mandatory showering by all asbestos workers, labelling and signs, proper waste disposal procedures, comprehensive training, medical examinations, and extensive recordkeeping.

Asbestos waste is the responsibility of the site owner from "cradle to grave" and compliance with all DOHS hazardous waste regulations is mandatory. A comprehensive waste handling program would include the required the generator number, a certified waste hauler, a properly completed manifest, waste wrapped in plastic or sealed in impermeable containers, labelling, and disposal in an approved landfill.

8.0 CONCEPTUAL COST ESTIMATE CRITERIA

Based on the data gathered for Areas A and B, cleanup of most of the Hunters Point site could be accomplished by collecting and removing surface ACM. More extensive cleanup is needed in the vicinity of the Scrap Yard and the demolished buildings in Region III.

A conceptual cost estimate could be developed by delineating the grid areas where surface materials were found and estimating both the quantity of material targeted for cleanup and the time required to complete the cleanup task.

Areas in the vicinity of the Scrap Yard and the demolished building sites in Region III should be assumed to be extensively contaminated with asbestos debris so additional cleanup efforts should be considered. If soil excavation is necessary in the site development master plan, then removal of contaminated soil to a depth of 6 inches is recommended followed by replacement with clean fill material. If excavation is not required, then a cover layer of 6 inches of fill material to cap the surface of these contaminated areas may be feasible.

Any cost estimate should include at least the following costs as unit cost figures are developed:

- labor and materials to inspect the site and collect waste ACM,
- labor and materials to properly package waste material for disposal,
- labor and equipment to transport and dispose of asbestos waste,
- labor and equipment to excavate, transport, and dispose of contaminated soil (if applicable),
- labor and equipment to transport and replace with or cover with fill material,

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Galson Project No. S6-518

safety equipment to meet state-of-art techniques for ACM handling,
liability insurance, and
environmental quality assurance.

APPENDIX I

ASBESTOS MINERALOGY

Asbestos Minerals in Modern Technology

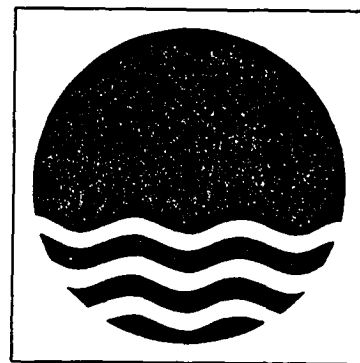
S. Speil and J. P. Leineweber

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ASBESTOS MINERALS IN MODERN TECHNOLOGY

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INTRODUCTION

Asbestos is a generic term for a variety of hydrated silicate minerals which have one common attribute, namely, the ability to be separated into relatively soft, silky fibers. Although the name is ordinarily associated with those varieties which have technologic importance, it is applicable to all minerals which fit the above description. The term "asbestiform minerals" is perhaps most descriptive.

The known varieties of asbestiform minerals can be divided into two main classes on the basis of their crystal structures: serpentine and amphiboles. The sole member of the serpentine class is chrysotile asbestos, which is by far the most common of the asbestiform minerals. It accounts for more than 95 per cent of the asbestos fiber produced today.

There are five recognized asbestiform varieties of amphibole: crocidolite, amosite, anthophyllite, tremolite and actinolite. Although the amphiboles are common rock-forming minerals, the asbestiform varieties are much less abundant than chrysotile.

The physical and chemical properties of the asbestiform minerals can be directly related to their crystal structure and chemical composition. In turn, the physical and chemical properties are responsible for the commercial importance of asbestos. It is understandable, therefore, that great emphasis has been placed on the elucidation of the structure and composition of these important minerals.

Several comprehensive reviews on the asbestiform minerals have been published in recent years, including N. W. Hendry(30), R. Gaze(25), A. A. Hodgson(33) and W. A. Deer, R. A. Howie, and J. Zussman(17). The objective of this paper is to bring this information up to date with particular emphasis on recent developments concerning the physics and chemistry of the asbestiform minerals. In addition, the uses of asbestos will be discussed briefly in relation to the properties of the individual species.

OCCURRENCE

The epigenesis and occurrence of the asbestiform minerals have been the subject of considerable geologic and petrologic research. Chrysotile and amphibole fibers are found in entirely different geologic formations. Chrysotile was most probably formed as a result of two separate metamorphic changes in ultrabasic rocks of volcanic origin. The first stage involved the formation of serpentine by the hydrothermal alteration of the original rock. At some later time the chrysotile was formed in cracks and fissures in the rock by recrystallization of the serpentine, again by an aqueous solution and reprecipitation process. In most cases, chrysotile occurs as "cross fibers" which are oriented in a parallel array across the veins in the serpentine rock as shown in Figure 1. Occasional occurrences of "slip fiber" are found in which the fiber is oriented parallel to the vein as shown in Figure 2.

A notable exception to the normal mode of occurrence of chrysotile is the fiber found in the New Idria serpentinite of Western California and at Stragari, Yugoslavia⁽⁴⁵⁾. The New Idria fiber is generally referred to as Coalinga fiber. The great bulk of this deposit consists of soft powdery pellet-like agglomerates of chrysotile as shown in Figure 3. The material may be the result of intensive crushing and pulverization during or after serpentinization. In addition to its unusual mode of occurrence, Coalinga chrysotile is also unusual from the standpoint of its physical structure. This feature will be discussed in the appropriate section of this paper.

The genesis of the amphibole fibers is not as clear-cut as that of chrysotile. Their name, taken from the Greek word *amphibolos*, meaning ambiguous, is a very apt choice. Figure 4 is a typical example of the mode of occurrence for crocidolite which is found in the banded ironstones of the Transvaal system of South Africa. They are metamorphized rocks of sedimentary origin, which accounts for the variability in composition of the host rocks and consequently of the fiber. The only significant occurrence of amosite is also found in this area. Crocidolite is found in other areas, including Bolivia and Western Australia.

Asbestiform anthophyllite is found in many places throughout the world, but there are only a few deposits of commercial importance in Finland and the United States. Tremolite and actinolite are the result of metamorphism of carbonate rocks. They are widely distributed in nature, but of little commercial significance. Tremolite is a very common contaminant of commercial talc.

CRYSTAL STRUCTURE

Chrysotile. The crystal structure of chrysotile asbestos was first determined by Warren and Bragg(72) and later elucidated by Warren and Herring(69). These investigators determined that the mineral has a layered-type structure similar to the minerals of the kaolinite group. The basis of the structure is an infinite silica sheet $(\text{Si}_2\text{O}_5)_n$ in which all the silica tetrahedra are pointing in the same direction. Attached to one side of this sheet is a brucite $\text{Mg}(\text{OH})_2$ layer in which two out of every three hydroxyls are replaced by the apical oxygens of the silica tetrahedra. The result is a double sheet as shown in Figure 5. The mismatch in the dimensions of the silica and brucite sheets introduces a strain in the structure. Better matching of the layers and relief of the strain can be accomplished in three ways.

1. Substitution of larger ions in the silica sheet or smaller ions in the brucite sheet.
2. Distortion of the octahedral brucite network or of the tetrahedral silica network.
3. Curvature of the sheet with the brucite layer on the outer surface.

Ever since the first electron micrographs were published showing the apparent tubular structure of chrysotile(7, 50, 70), there has been considerable controversy over the morphology of the fibers. Whittaker(76), by means of careful X-ray diffraction studies, demonstrated that the lattice was definitely curved.

Although he was unable to show whether the structure was a cylindrical arc, a closed circular cylinder, or a cylindrical spiral, he favored a spiral structure. The tubular concept was supported further when Maser, Rice and Klug(44) published the electron micrograph of Figure 6 showing an end-on view of a chrysotile fiber bundle. The fibrils were definitely cylindrical and included many which appeared to be pairs of concentric cylinders.

A recent paper by K. Yada(81) has furnished what appears to be the final answer to the structure of chrysotile fibrils. By means of high resolution electron microscopy, he was able to observe the actual crystal lattice planes both parallel and perpendicular to the fiber axis. These pictures, Figures 7 and 8, show that most of the fibers have a hollow cylindrical form. The lattice planes have a multispiral arrange-

ment confirming the prediction of Whittaker(76). Also apparent in several of Yada's pictures is the presence of crystallographic dislocations which strongly suggest that the basic structural unit consists of a single magnesia-silica sheet, rather than a double sheet as previously postulated by most authors. Yada's observations also confirm Whittaker's hypothesis that the basic spiral element consists of five silica-magnesia units with approximately 10 silica-magnesia units forming the 70 Å wall of a single fibril.

Occasional fibers were observed which were solid rather than hollow. Although these fibers are relatively common in the samples, they are not enough to account for the discrepancy between the measured and calculated densities reported by Pundsack(55).

One final point should be made about the Yada micrographs. The outside surface of most of the fibers shows the presence of highly disorganized or amorphous material. This is the result of damage to the outer layer of fibrils by the electron beam under the conditions of observation.

There are two other serpentine minerals found in chrysotile-bearing rock: lizardite and antigorite(20). They both have the same chemical composition and the same fundamental sheet structure as chrysotile. The differences between these minerals reflects the way the strain in the crystal lattice has been relieved. Lizardite, which is the principal constituent of massive serpentine, generally has an extremely fine grained, platy morphology, visible only under the electron microscope in most specimens. Its structure has not yet been elucidated, but X-ray diffraction patterns indicate flat rather than curved sheets. Antigorite, on the other hand, does show evidence of curved sheets. Two of its unit cell dimensions are equal to chrysotile, but the third is much larger and variable. This third (b) dimension can vary from 18.5 Å to as large as 100 Å, compared to the 9.2 Å value for chrysotile. It is believed that the structure consists of undulating sheets the periodicity of which corresponds to the variable unit cell dimension.

Amphiboles. The basic crystal form of the amphibole minerals is less complicated than that of the serpentines. The basic structural unit is a double silica chain (Si_4O_{11}). As in the chrysotile sheets, all of the silica tetrahedra point in one direction. These chains are paired, "back-to-back", with a layer of hydrated cations in between to satisfy the negative charges of the silica chains. The final structure is formed

by the stacking of these sandwich ribbons in an ordered array. A pictorial concept of this structure is shown in Figure 9. The various minerals in the amphibole groups are characterized by the cations which occur in the structure. The principal cations are magnesium, iron, calcium and sodium. Since the bonding between these ribbons is rather weak, the crystals are easily cleaved parallel to the ribbons along A-A. If the cleavage is very facile, the result is an asbestiform mineral.

For each variety of asbestiform amphibole, there is a corresponding massive form with a different mineral name. Normally the asbestiform varieties are not found along with the massive counterparts. Undoubtedly, the local geo-chemical conditions extant at the time of formation contributed to the relative ease of cleavage of any specific deposit and, therefore, to its commercial utility. The massive and asbestiform varieties have the same chemical compositions and X-ray crystal structures. They can be distinguished by their physical properties and by petrographic examination.

CHEMICAL COMPOSITION

The chemical composition of commercially available chrysotiles from various locations are shown in Table 1. For comparison, analyses of lizardite and antigorite are included. In all cases, it is apparent that the composition differs very little from the idealized composition of $Mg_3(Si_2O_5)(OH)_4$. The impurities which are present may be part of the crystal structure or due to associated minerals. The most common impurity is iron. This can be in the form of ferrous (Fe^{++}) or ferric (Fe^{+++}) ions. It is generally assumed that the Fe^{+++} can be substituted for silicon in the silica sheets, and the Fe^{++} can be substituted for the magnesium in the brucite layer. The next most common impurity in chrysotile is aluminum. Since aluminum can assume either tetrahedral or octahedral coordination it can be substituted in either the silica or brucite layers. Other impurities, generally found to be associated with chrysotile in lesser amounts than iron or aluminum, are calcium, chromium, nickel, manganese, sodium and potassium.

The ionic radii of the ions commonly associated with chrysotile are given in Table 2. Since these ions vary considerably in size, they can have an effect on the strains which exist in the chrysotile lattice. Ions which are larger than silicon and smaller than magnesium will tend to relieve the

APPENDIX D – GALSON ASBESTOS REPORT

APPENDIX I – ASBESTOS MINERALOGY
PAGE (1-7)

AREA STUDY FOR ASBESTOS-CONTAINING
MATERIAL AND ORGANIC AND INORGANIC SOIL
CONTAMINATION (VOLUME II)

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specific amphiboles. The tubular appearance of chrysotile under the electron microscope is specific. When electron diffraction is used in conjunction with electron microscopy a better, but still not conclusive, identification of amphiboles is possible.

The electron microprobe is a relatively recent development which is proving of great value for the characterization of small amounts of material. With this instrument it is possible to obtain a complete chemical analysis on a particle as small as one micron. It is also possible to study the same particles with both the electron microprobe and the electron microscope, thus making a more complete characterization possible.

Table 6 is a listing of the properties of the asbestiform minerals used for their characterization.

SOURCES OF FIBER

Hendry⁽³⁰⁾ at the 1965 Conference on Biologic Effects of Asbestos summarized the pertinent aspects of the occurrence, production and commercial applications of asbestos fiber.

Table 7 presents the world production of asbestos in 1966⁽⁴³⁾. Production has increased with few changes in the relative standings of the producing countries.

The major difference is the great increase in Russian production which now outranks Canada as the major producer. The increased production in the United States over the past few years is due to the recent development of the Coalinga fiber deposits in California. One important change since 1966 is the closing of the Australian crocidolite mines and the elimination of this source from the market. Thus, South Africa remains as the one significant area producing crocidolite and amosite.

Chrysotile accounts for approximately 95 per cent of commercial asbestos. Chrysotile asbestos from Quebec is available in more than 50 standard or specialized grades to meet specific requirements. Some of the larger asbestos mills, such as that of the Jeffrey mine in Asbestos, Quebec, produce many of these grades simultaneously by a complex system of continuous crushing, screening, and aspiration from the same mill feed material.

All fibers from Quebec are classified by a standardized system which, with some modifications, forms the basis for other classification systems in use throughout the world. The longest fibers are Groups 1 and 2, with fiber lengths of over 3/4 in. and from 3/8 to 3/4 in., respectively. These consist of hand-selected cross-vein fiber and are termed "crude" asbestos grades since they are normally given final preparation by the ultimate user. Groups 3 through 7 are classified as "milled" fiber with decreasing fiber length, as measured by the Quebec Standard Screen Test(59). Each group is further sub-divided into a number of sub-grades according to their "crudiness", content of grit, bulking characteristics, and absorption properties. Subgroup fibers from different sources are not necessarily interchangeable for specific end applications. In the asbestos trade, a "crudy" fiber is one which contains a large number of unopened fiber bundles; those fiber subgrades in which the fibers have been well fiberized or subdivided are known as "opened" grades.

Table 8 gives the approximate distribution by grades of chrysotile fiber produced in Canada and the United States, as compared to that produced in the U. S. S. R. in 1966.

TABLE 8. APPROXIMATE PRODUCTION OF CHRYSOTILE FIBERS BY GRADES IN 1966

Grade	U. S. S. R.	U. S. and Canada
#1 Crude		
	18,000	200
#2 Crude		
3	130,000	45,000
4	180,000	500,000
5	650,000	200,000
6	390,000	230,000
7	530,000	620,000

Applications. The commercial applications of asbestos are so numerous that this review can do no better than refer the reader to the many excellent texts which adequately cover this subject (8, 62). The uses range from asbestos-cement products or floor tile which consume hundreds of thousands of tons, to specialty filtration applications which may consume only several tons annually. Asbestos imparts to a great variety of products a combination of properties which cannot be attained by using other materials. Its strong fibrous form reinforces other media, such as plastics or cement, or controls viscosity of many systems; its inorganic nature is important for resistance to heat and chemical or environmental agents; its fine size contributes filtration efficiency and insulating efficiency; its abundance and low cost is a significant factor in promoting commercial applications.

On the basis of relative abundance alone, chrysotile will be used wherever possible in preference to other forms of asbestos. Where a combination of extreme bulking characteristics plus low water content and high temperature resistance are desirable, e.g., thermal insulations, amosite has usually been preferred. Applications requiring resistance to acids usually take advantage of the relatively good acid resistance of crocidolite. Textile products require a soft, silky, longer grade of chrysotile although crocidolite has also been used for acid resistant textile forms. Geographic considerations may exert economic influence to increase the usage of specific amphiboles, such as anthophyllite in Finland, or the crocidolites in South Africa. Anthophyllite has shown specific advantages over other asbestiform minerals in reinforcing polypropylene products and is used almost exclusively.

In general, specific grades of chrysotile have been developed by the asbestos industry for each market. Although the longer fibers are considered to be of better quality, it would be just as impractical to use relatively long 4-grade fiber in floor tile as it would be to attempt to make satisfactory asbestos paper or asbestos cement products with 7-grade fibers. In fact, some applications may even require the presence of a considerable amount of the non-fibrous, fine grained particulate serpentine which is contained in some of the 7-grade subgroups. Normally, the consumer selects the least expensive grade of fiber which will meet his needs.

Other Sources. Commercial production and applications of asbestos fibers are usually considered to be the only significant sources of asbestos fibers entering the environment. However, on closer examination it becomes evident that we should consider not only the question of impurities in asbestos, but also the fact that asbestiform minerals are an ubiquitous impurity in many deposits of commercially valuable nonmetallic minerals, such as mica and talc.

Talc particularly is a mineral product with widespread commercial and cosmetic applications. Figure 24, an electronmicrograph of a typical beneficiated industrial talc, reveals the presence of considerable fibrous tremolite. Approximately 8,000 tons of talc are used annually as a carrier for pesticides⁽⁷¹⁾. Windom, et al⁽⁷⁹⁾, investigated the distribution of talc in the atmosphere and in glacier and snow samples to study the migration of pesticides. Their samples covered a world-wide geographic distribution. In practically every sample, amphiboles were detected along with the talc, as might be anticipated from the common occurrence of amphiboles in talc.

Cralley⁽¹⁴⁾, et al, have recently investigated twenty-two cosmetic talcum products. All had significant fiber contents ranging from 8 to 30 per cent by count of the total talc particulates, and averaging 19 per cent. The fibrous talc included tremolite, anthophyllite, and chrysotile. They made special note of the fact that cosmetic talcum products should be included as a source of fibers from which may be derived ferruginous bodies observed in the lungs of humans.

In another investigation by the U. S. Public Health Service of the source and identification of respirable fibers, Cralley⁽¹⁵⁾ noted that there are more than one hundred different natural minerals with some degree of fibrous structure which may occur in respirable sizes. In addition to the asbestos minerals, these included fuller's earth, zeolite, vermiculite, calcium carbonate, gypsum, pyrophyllite, talc, kyanite, hornblende, mica, magnesite, and many others.

Pure serpentine is considered to be composed of non-fibrous antigorite or lizardite based on petrographic and X-ray examination. However, electron microscopy reveals the fact that all serpentine rocks contain significant amounts of chrysotile. Figure 25 is an electronmicrograph of a practically translucent "museum grade" serpentine specimen from Warren County, New York, obtained through Wards Natural Science Establishment. Despite its apparent content of approximately 20 per cent of fibers, optical microscopy showed no chrysotile whatsoever.

Examination of many other authenticated samples of "pure serpentine" has revealed the presence of chrysotile. Serpentine rock deposits are widespread throughout the world. In the U. S., they form the Franciscan serpentine belt along the entire length of California, just as they form much of the Appalachian range on the East Coast. They are used as the basis for many large-scale applications, such as ballast, road construction, aggregate, building stone, etc. During grinding and preparation for such commercial usage, there could be opportunity for escape of fibrous material.

CONCLUSIONS

It is important for the medical investigator of the biologic effects of asbestiform minerals to properly understand the wide diversity between the several individual asbestos minerals, the ubiquitous nature of their occurrence, both in commercially valuable form and as impurities in other materials, and the widespread existence of many other minerals with fibrous form. It is only by relating experimental biologic evidence with the variations in physical size and form, in physical strength attributes, in physico-chemical surface reactions, in chemical reactivity, and in associated impurities, that we can ultimately arrive at valid medical conclusions.

ACKNOWLEDGEMENT

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APPENDIX II

LABORATORY ANALYTICAL METHODS

NIOSH Method 7400

EPA Bulk Sample Summary

Lab Report:

Background Information and Analytical Criteria
for Distinguishing Between
Natural and Man-Processed Asbestos Materials

FORMULA: various

FIBERS

M.W.: various

METHOD: 7400

ISSUED: 2/15/84

REVISION #1: 5/15/85

OSHA: 0.5 asbestos fibers ($> 5 \mu\text{m}$ long)/mL

NIOSH: 0.1 asbestos f/mL [1]; 3 glass fibers ($>10 \mu\text{m} \times <3.5 \mu\text{m}$)/mL [2]

ACGIH: 0.2 crocidolite; 0.5 amosite; 2 chrysotile and other asbestos, f/mL

PROPERTIES: solid,
fibrous

SYNONYMS: asbestos (actinolite [CAS #13768-00-8], grunerite (amosite) [CAS #12172-73-5], anthophyllite [CAS #17068-78-9], chrysotile [CAS #12001-29-5], crocidolite [CAS #12001-28-4], tremolite [CAS #14567-73-8]); fibrous glass.

SAMPLING

MEASUREMENT

SAMPLER: FILTER
(0.8 to $1.2 \mu\text{m}$ cellulose ester
membrane, 25-mm diameter;
foil-wrapped cassette)

FLOW RATE*: ≥ 0.5 L/min (see Step 5)

VOL-MIN*: 400 L @ 0.1 fiber/mL

-MAX*: 2000 L

*Adjust for 100 to 1300 fibers/ mm^2 (step 5)

SHIPMENT: routine

SAMPLE STABILITY: stable

FIELD BLANKS: 10% (≥ 2) of samples

! TECHNIQUE: MICROSCOPY, POSITIVE PHASE CONTRAST

! ANALYTE: fibers (manual count)

! SAMPLE PREPARATION: acetone/triacetin method

! COUNTING RULES: Set A (P&CAM 239 [3,4]) or Set B
(modified CRS [5])

! EQUIPMENT: 1. positive phase-contrast microscope
2. Walton-Beckett graticule (100 μm
field diameter): A Rules use
G-22; B Rules use Type G-24
3. phase-shift test slide (HSE/NPL)

! CALIBRATION: phase-shift detection limit about
3 degrees [7]

ACCURACY

! RANGE: 100 to 1300 fibers/ mm^2 filter area [6]

RANGE STUDIED: 80 to 100 fibers counted

! ESTIMATED LOO: 7 fibers/ mm^2 filter area

BIAS: EVALUATION OF METHOD

! PRECISION: 0.10 to 0.12 (A Rules) [3]

OVERALL PRECISION (s_p): 0.115 to 0.13
(A Rules) [3]

APPLICABILITY: The working range is 0.02 fiber/mL (1920-L air sample) to 1.25 fibers/mL (400-L air sample). The method gives an index of airborne asbestos fibers but may be used for other materials such as fibrous glass by inserting suitable parameters into the counting rules. The method does not differentiate between asbestos and other fibers. Asbestos fibers less than ca. $0.25 \mu\text{m}$ diameter will not be detected by this method [7].

INTERFERENCES: Any other airborne fiber may interfere since all particles meeting the counting criteria are counted. Chain-like particles may appear fibrous. High levels of non-fibrous dust particles may obscure fibers in the field of view and increase the detection limit.

OTHER METHODS: This method introduces changes for improved sensitivity and reproducibility. It also replaces P&CAM 239 [3,4] and Method 7400 (dated 2/15/84).

5/15/85

7400-1

ASBESTOS

The sampling and analytical methods incorporated in this study are those recommended in NIOSH Method 7400 for the quantification of airborne asbestos fiber concentrations. The preferred index of asbestos exposure is the number of fibers longer than 5 microns with a length to width aspect ratio greater than three to one, as counted on membrane filters at 430X magnification by phase contrast microscopy. This method of analysis requires the use of specific procedures for the collection of the sample.

The principle of the sampling method is as follows:

A known volume of air is drawn through a 1.2 micrometer pore size, 25 mm diameter cellulose acetate filter utilizing a personal sampling pump. The pumps are calibrated prior to sampling using either a bubble burette or a precision rotameter. Any fibrous materials present in the sampled air impact on the filter. A portion of the filter is analyzed visually using phase contrast microscopy. Because the entire filter is not analyzed, it is necessary to obtain the best possible uniformity of sample deposition on the filter. This is achieved by mounting the filter on a porous pad in an open-face cassette (filter holder).

When analyzing the filter, only objects with a length at least three times the width and a total length of at least 5 microns are counted. The total number of fibers on the filter (with the above characteristics) is computed by determining the average number of fibers per unit area on a small portion of the filter and then multiplying this number by the total filter area. The fiber concentration in air is then calculated by dividing the total number of fibers collected by the volume of air sampled.

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Asbestos samples analyzed using the NIOSH method must contain a minimum of 5-1/2 fibers/100 fields to provide a statistically significant concentration measurement. A field is the area covered by the microscopy scale during the counting process. For samples with fewer than 5-1/2 fibers per 100 fields, a maximum concentration is calculated using a nominal value of 5-1/2 fibers/ 100 fields and the volume of air sampled. Maximum concentrations are indicated by a less than (<) sign.

Thus, for comparison purposes, samples with fiber counts less than 5-1/2 fibers/100 fields are statistically identical. For example, a fiber count of 5 fibers/100 fields is statistically identical to a count of 1 fiber per 100 fields, rather than being 5 times greater.

In general, the precision of the counting method decreases with decreasing fiber concentrations. The coefficient of variation for this method is determined using Figure 1 in conjunction with the total fiber count reported on the laboratory data sheet. To determine the 95 percent confidence interval for the sample results, the reported value is multiplied by two times the coefficient of variation.

Finally, note that this analytical method does not positively identify the fibers as asbestos.

ASBESTOS IDENTIFICATION - BULK MATERIALS

Bulk samples of building materials taken for asbestos identification are first examined for homogeneity and preliminary fiber identification at low magnification. When discrete layers are identified, each is treated as a separate material. Positive identification of suspect fibers is made by analysis of subsamples with a polarized light microscope. Figure 2 is a flow sheet for the analysis procedure. Identification is made on the basis of comparing the known physical and optical characteristics of the various types of asbestos with those of the suspect materials.

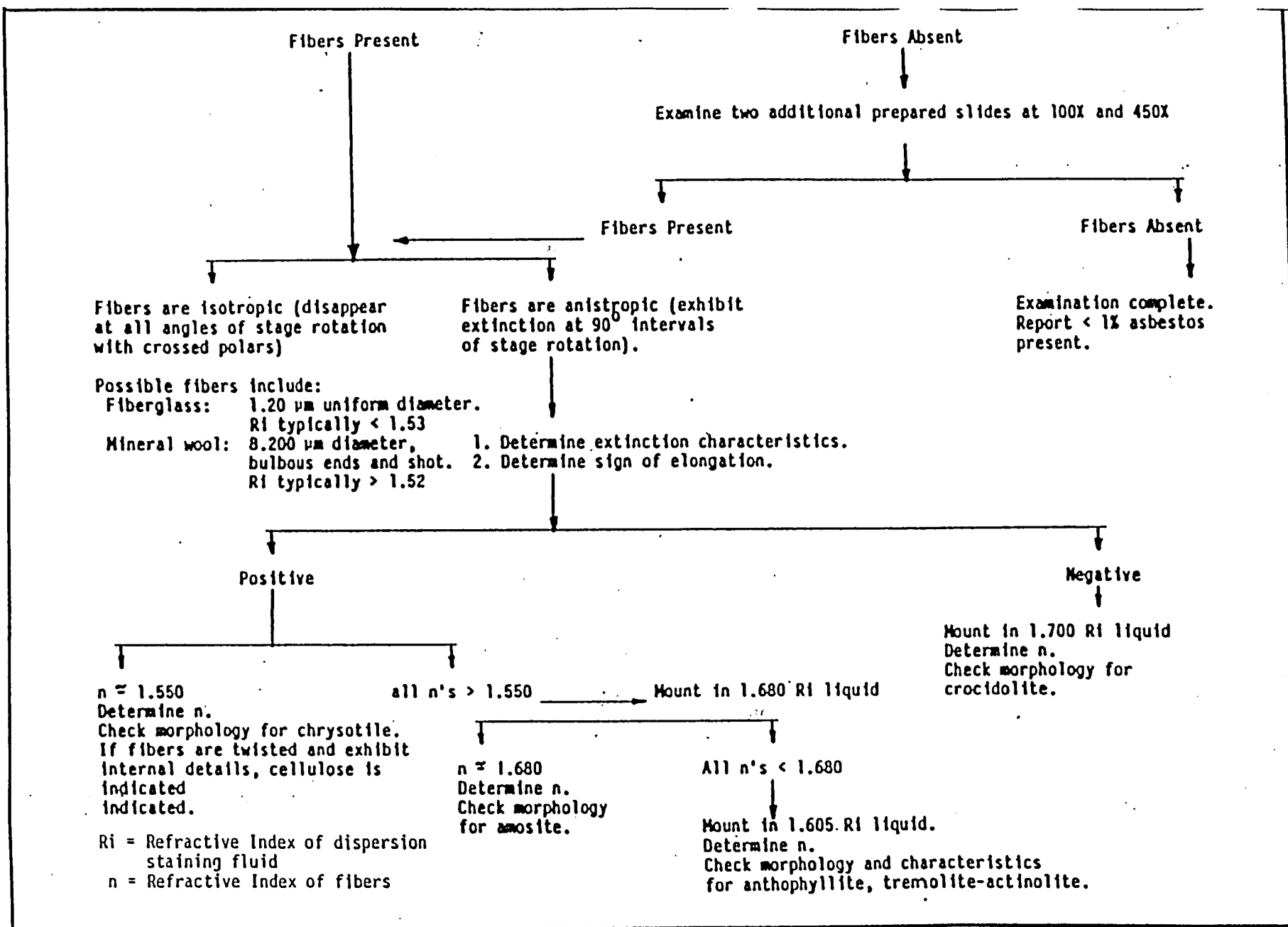
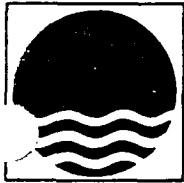


Figure 2. Flow Chart for Analysis of Bulk Samples by Polarized Light Microscopy

Reference: "Tentative Method for the Determination of Asbestiform Minerals in Bulk Samples by Polarized Light Microscopy", Environmental Monitoring Systems Laboratory, USEPA, Research Triangle Park, North Carolina (March, 1980)



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LABORATORY REPORT

BACKGROUND INFORMATION AND ANALYTICAL CRITERIA

FOR DISTINGUISHING BETWEEN NATURAL AND MAN-MADE ASBESTOS MATERIALS

Submitted by Tom Biel

Hunters Point Boring Samples

The rock fragments observed in the boring samples from Hunters Point consist predominantly of serpentinites associated with the Franciscan formation¹. Other rock types commonly observed consist of chlorite schist, chert, vein quartz, mica schist and occasionally actinolite schist.

The serpentinite fragments from the borings resemble the serpentinite samples collected by the GALSON Certified Industrial Hygienist at local outcrops. Both materials contain naturally occurring chrysotile asbestos in variable amounts.

Serpentinite is a metamorphic rock resulting from the late stage hydrothermal alteration of ultramafic igneous rocks. Serpentinites consist of mixtures of serpentine minerals in various proportions. The serpentine group consists of three minerals: Chrysotile (fibrous, asbestos), antigorite (platy, non-asbestos) and lizardite (massive, non-asbestos).

Minerals of the zeolite group were frequently observed in the boring samples. Zeolites are not asbestos, but some species form fibrous aggregates. Zeolite minerals also occur in massive and prismatic crystalline aggregates, only fibrous zeolites were noted for this report. Zeolites are hydrated aluminosilicate minerals that structurally belong to the group known as the framework silicates. The zeolite group consists of more than twenty well defined mineral species. The zeolite most commonly present in the samples is laumontite. The presence of zeolite minerals in the rock samples is consistent with the regional geology of the area as noted by Miyashiro, 1983².

In addition to chrysotile and actinolite, another naturally occurring asbestiform mineral was noted in the rock fragments removed from the borings. These minerals are chrysotile and actinolite. The presence of both minerals is consistent with the local geology³.

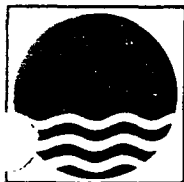
Hunters Point Rock Outcrop Samples

The outcrop samples submitted consist of one rock type, serpentinite.

¹Metamorphism and Metamorphic Belts.

²Akiho Miyashiro.

³John Wiley & Sons, 1973.



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The serpentinite samples grade in color from pale gray-green to dark green. Most samples display a mottled texture consisting of several hues of green. Translucent green inclusions of massive to lamellar antigorite are abundant. Occasional veins of chrysotile are found, usually in association with antigorite. Occasional inclusions of chlorite and actinolite are found in the samples.

A massive sample of serpentinite was randomly selected and pulverized in a mortar and pestle. The resulting powder was examined using a stereoscope and then a polarizing microscope. Traces of chrysotile were detected within the rock sample. This observation was consistent with results from weathered rock fragments taken from the borings. This indicates that most massive serpentinites contain at least a very small amount of detectable chrysotile. Samples with abundant antigorite inclusions usually contain higher concentrations of chrysotile.

In several outcrop samples amygdules filled with massive zeolite minerals were observed.

ANALYTICAL CRITERIA FOR DISTINGUISHING BETWEEN NATURAL AND MAN-MADE MATERIALS

All determinations of natural vs. man-made asbestos materials were made using a stereoscopic microscope at 15x magnification. The asbestos detected was classified by using its relationship with other materials present in the sample. The presence of asbestos was later confirmed using Polarized Light Microscopy and dispersion staining.

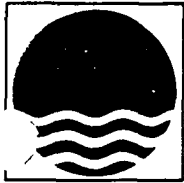
Natural Asbestos

The rocks in the area of Hunters Point have undergone zeolite and prehnite-pumpellyite facies metamorphism¹. Considering the basic and untrabasic rocks initially in the area, the presence of chrysotile asbestos and actinolite asbestos in at least small amounts can be expected. Outcrop and boring rock samples have yielded detectable amounts of chrysotile and, to a much lesser degree, actinolite.

Boring samples were classified as containing natural asbestos when they met the following criteria:

1. Weathered rock fragments were broken and asbestos fiber bundles could be detected.
2. Abundant antigorite was present in a sample containing chrysotile, and no significant man-made materials were present.

¹Miyashiro, 1973.



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Man-Made Asbestos Materials

Man-made asbestos materials were found in surface and boring samples that contained the asbestos species of chrysotile, amosite and crocidolite. Amosite and crocidolite asbestos occur in different geologic settings then are present in the area of Hunters Point. Crocidolite is only produced commercially in South Africa and Australia. Amosite is only produced commercially in South Africa. Cummingtonite (a variety of amosite) can occur only at a higher grade of metamorphic facies¹, then is present in the Hunters Point Area. Chrysotile asbestos was classified as a constituent of man-made materials when it was associated with material such as:

1. Amosite or crocidolite
2. Asphaltic material
3. Fiberglass, cellulose or plaster

Potential Hazard of Naturally Occurring Asbestos

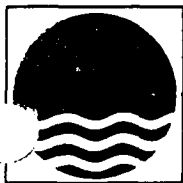
The majority of serpentinite samples examined using a stereoscopic microscope at 15x magnification were observed to contain detectable chrysotile asbestos. Most fiber concentrations ranged between trace and five percent. Examination of these samples using electron microscopy would probably result in higher fiber concentrations.

Most chrysotile observed in the serpentinite samples consists of fibrous bundle disseminated within the massive rock. Veins of chrysotile asbestos were observed in several samples.

Soils examined in association with weathered serpentinite contain free fibrous bundles of chrysotile. This chrysotile was commonly observed in numerous soil samples.

If the soil and rock materials observed in the study area were disturbed by heavy equipment, it is likely that some natural chrysotile fibers would become airborne. This could result in a health risk to nearby workers. The magnitude of this asbestos exposure cannot be determined at present.

¹Bernard W. Evans, AGI Data Sheet 23.2, American Geological Institute, 1982.



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APPENDIX III

SURFACE SAMPLE LOG AND RESULTS

SURFACE SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
505-SHIN-01	11/13/86	Yes	Building 505: 150' X 200' X 20'. Shingles used on side of building. Probably transite.	20-30 Chrysotile	M
503-DEBRIS-02	11/13/86	Yes	Probably crushed pipe lagging. Building 503 (demolished).	45-55 Amosite 30-40 Chrysotile	M
503-PLASTER-02	11/13/86	Yes	Plaster on wire mesh. Building 503 (demolished).	1-5 Chrysotile	M
503-PREF-02	11/13/86	Yes	Preform pipe insulation, 4-inch diameter. Building 503 (demolished).	35-45 Chrysotile	M
503-ROOFPAPER-02	11/18/86	Yes	Tar paper. Probably from roof.	1-5 Chrysotile 1-5 Amosite	M
503-TRANSITE-02	11/13/86	Yes	Shingle-like material. Possibly transite. Building 503 (demolished).	20-30 Chrysotile	M
503-VAT-02	11/18/86	Yes	Floor tile on concrete slab. Possibly vinyl asbestos tile.	1-5 Chrysotile	M
507-PLASTER-03	11/13/86	Yes	Plaster on wire mesh. Building 507 (demolished).	ND	
507-PREF-03	11/13/86	Yes	Preform insulation. Building 507 (demolished).	15-25 Amosite 50-60 Chrysotile	M

(3-1)

SURFACE SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
520-PLASTER-04	11/13/86	Yes	Plaster on wire mesh. Building 520 (demolished).	ND	
520-TRANSITE-04	11/13/86	Yes	Transite shingle material. Building 520 (demolished).	20-30 Chrysotile	M
DEBRIS-05	11/13/86	Yes	Debris on ground. Fibers, gypsum like materials.	ND	
CLOTH-06	11/13/86	Yes	Coarse cloth - possibly asbestos cloth.	90-100 Chrysotile	M
TRANSITE-06	11/13/86	Yes	Pile of debris on board by railroad tracks. Possibly transite board.	No Visible Fibers	
PREF-DEBRIS-07	11/13/86	Yes	Preform debris.	65-75 Amosite 1-10 Chrysotile	M
DEBRIS-08	11/13/86	Yes	Preform debris.	75-85 Amosite	M
DEBRIS-09	11/13/86	Yes	Preform debris.	45-55 Amosite 15-25 Chrysotile	M
STEAM-10	11/13/86	Yes	Steam pipe insulation. Pipe below ground in concrete trench from possibly power station.	65-75 Amosite 5-15 Chrysotile	M
PREF-11	11/13/86	Yes	Pipe lagging with canvas cover visible.	15-25 Amosite 50-60 Chrysotile	M
6/7-LAG/DEB-12	11/17/86	Yes	Wrap pipe lagging. At Pier 6/7 along shore.	85-95 Chrysotile	M

SURFACE SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
6/7-TRANSITE-12	11/17/86	Yes	Transite pipe. At Pier 6/7.	25-35 Crocidolite 15-25 Chrysotile	M
LAG/DEB-13	11/17/86	Yes	Preform pipe lagging; on shoreline. Fill site. Insulation may have floated to shore from bay.	Trace Chrysotile	M
DEB-14	11/21/86	Yes	Preformed or wet pack debris on gravel driveway; spillage only.	20-30 Chrysotile 1-10 Amosite	M
DEBRIS-14	11/17/86	Yes	Debris on pile. Preform pipe lagging.	65-75 Amosite 1-10 Chrysotile	M
CLOTH-20	11/24/86	Yes	Possibly asbestos cloth. Scrap yard; asphalt surface.	5-15 Chrysotile	M
DEB-20	11/24/86	Yes	Debris; probably pipe lagging. Representative of material over entire yard. 1" diameter. Scrap yard; asphalt surface.	40-50 Amosite 10-20 Chrysotile	M
LAG/DEB-21	11/24/86	Yes	Pipe lagging on asphalt surface. Typical of debris over scrap yard surface. Similar to DEB-20.	70-80 Chrysotile	M
LAG-22	11/24/86	Yes	Incident pipe left in yard. Not main yard. Pipe lagging. Asphalt surface.	65-75 Amosite 1-10 Chrysotile	M
INSUL-AD4-05	11/21/86	Yes	Possibly coiled insulation; 1/2" x 1-1/2" coil. Is ~2 feet long. Silvery fibrous material.	60-70 Chrysotile	M
BOILERLAGGING AD4-11	11/20/86	Yes	Lagging between firebrick and shell of abandoned small boiler near AD4-11 hole.	60-70 Chrysotile	M

SURFACE SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
PLAS-A	11/21/86	Yes	Plaster-like material deposited on surface along shore over ~ 50' length.	ND	
CT-B	11/21/86	Yes	1' x 1' acoustical ceiling tile. Most cellulose. Sampled gray material ~12 C.T. of this type.	ND	
TAR PAPER-C	11/21/86	Yes	Tar paper left by shore, spread over ~100 feet square; with asphalt debris.	ND	
TRANS SHIN-D	11/21/86	Yes	Shingle type material. Scattered 1"-2" diameter pieces over 100 feet square area.	5-15 Chrysotile	M
DEB-E	11/24/86	Yes	Pipe lagging on tank insulation; landfill site with sandblast sand. Covers ~3 spots; 10 feet square area total.	1-10 Amosite 75-85 Chrysotile	M
PLAS-F	11/24/86	Yes	Plaster debris - pieces 1/4"-4" diameter over site.	Trace Amosite	M
TRANS/TILE-F	11/24/86	Yes	Possibly vinyl tile - transite tile on ship floors. ~20 square feet of contaminated site.	25-35 Chrysotile	M
DEB/FG-G	11/24/86	Yes	Unidentified debris on ground; shiny long fibers in material; possibly fiberglass. Over 50 square feet of surface.	85-95 Amosite	M
PLAS-G	11/24/86	Yes	Plaster material on ground. Possibly from buildings. Over 20' x 50' area.	ND	M
TRANS/TILE-G	11/24/86	Yes	Transite tiles. Possibly from buildings. Over 20' x 50' area.	15-25 Chrysotile	M

SURFACE SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
VAT-G	11/24/86	Yes	Possibly vinyl asbestos tile, possibly from buildings. Floor tile. Over 20' x 50' area.	NA	
LAG/DEB-H	11/24/86	Yes	Lagging type material on surface, partially buried. Pipe lagging visible, debris on ground. 10' x 50' visible.	ND	N
DEB-I	11/25/86	Yes	Debris - tank or preform on surface and in willows.	55-65 Amosite 1-5 Chrysotile	M
TRANS PIPE-J	11/26/86	Yes	Transite pipe. Landfill along north end of yard, northeast corner. Open field.	15-25 Chrysotile 5-15 Crocidolite	M
CLOTH-K	11/26/86	Yes	Cloth cover over fiberglass insulation. Cloth coarse weave. Suspect on pipe; pipe on shoreline.	60-70 Chrysotile	M
SHTRK-K	11/26/86	Yes	Old sheetrock debris mixed with plaster. On shoreline.	1-5 Chrysotile	M
WPFTG-K	11/26/86	Yes	Wet packed material on fiberglass pipe. Material on shoreline.	70-80 Chrysotile	M
NAT ROCK FORM	11/25/86	No	Natural rock formation; rock outcropping on hillside above Building 813.		N

(3-5)

APPENDIX IV

SOIL SAMPLE LOG AND RESULTS

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
AC4-01	11/24/86	No	Gravelly sand; silt sand and serpentine; silt and gravel. Scrap yard; asphalt surface.	1-5 Chrysotile	N
AD2-01	12/3/86	No	Fine gravel in sand; light fill sand; rock; wire; sand; rock at bottom. Gravel railroad track bed beside Bldg 300.	ND	
AD4-01	11/21/86	No	Gravelly sand; gravel; clay-silt. Gravel; serpentine fractured rock fill field. - Fill soil.	Trace Chrysotile	N
AD4-02	11/24/86	Yes	Gravelly sand; sand; silty sand - tight with serpentine. Crystals at 4' depth - possibly chrysotile.	Trace Chrysotile	N
AD4-03	11/24/86	No	Gravelly sand; silty and serpentine fragments; silt and serpentine. Yard and asphalt surface.	1-5 Chrysotile	N
AD4-04	11/24/86	No	Gravelly sand; sand and silt and serpentine; sand and silt. Yard and asphalt surface.	1-5 Chrysotile	N
AD4-05	11/21/86	No	Gravelly sand; silty and serpentine; silty gravel; fine fractured rock. Dirt field.	1-5 Chrysotile	N
AD4-05 FIBROUS	11/21/86	Yes	Insulation - fibrous type as surface sample at 4" depth.	50-60 Chrysotile	M
AD4-06	11/21/86	No	Gravelly sand; silty gravel and serpentine; silty sand and serpentine. Paved road - Spear Street.	1-5 Chrysotile	N
AD4-07	11/21/86	No	Tight gravel containing silt; serpentine rock in clay; Fine sand and serpentine; gravel; clay. Paved road - Spear Street	1-5 Chrysotile	N

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
AD4-08	11/21/86	No	Gravelly sand, sandy clay, sandy gravel and serpentine; some rock. Paved road-Spear.	1-5 Chrysotile	N
AD4-09	11/21/86	No	Sandy clay; gravel-fractured rock and sandy clay; clay and fractured rock; fibrous rock. Paved road-Spear.	10-20 Chrysotile	N
AD4-10	11/20/86	No	Gravel surface, gravelly clay fill. Serpentine present.	Trace Chrysotile	N
AD4-11	11/20/86	No	Gravel surface, gravelly sand with clay. Serpentine present.	1-10 Chrysotile	N
AD4-12	11/21/86	No	Gravelly clay with serpentine, tight silt/clay with serpentine; gravel storage area beside "R" Street.	1-5 Chrysotile	N
AD4-13	11/20/86	No	Gravel surface, oil stain (spill) on gravel . Gravel and sand fill.	1-10 Chrysotile	N
AD4-14	11/20/86	No	Asphalt surface, gravelly clay fill.	Trace Chrysotile	N
AD4-15	11/20/86	No	Asphalt surface, clay with gravel fill. Serpentine present.	ND	
AD4-16	11/20/86	No	Gravel surface, gravelly clay fill. Serpentine present.	ND	
AD4-17	11/20/86	No	Gravel surface, gravelly fill, last foot - bay mud fill. Serpentine present.	Trace Amosite	M
AD4-18	11/20/86	No	Asphalt road surface, gravel and clay fill. Serpentine.	1-5 Chrysotile	N

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
AD4-19	11/20/86	No	Gravel surface, gravelly clay and sand. Serpentine.	1-5 Chrysotile	N
AD4-20	11/19/86	No	Sand and silt; sand and gravel; serpentine rock. gravel parking lot.	Trace Chrysotile	N
AD4-21	11/19/86	No	Coarse sand with silt, gravel and clay gravel; serpentine rock bottom. Fill site west of "I" Street.	ND	
AD4-22	11/19/86	No	Sand and gravel; silt and gravel; gravel; clay. West of "I" Street, east of Building 704 .	1-5 Chrysotile	N
AD4-23	11/21/86	No	Gravel; gravelly clay with serpentine; coarse sand; gravel. Gravel drive thru gravel storage yard.	1-5 Chrysotile	N
AD4-24	11/21/86	No	Gravelly clay, clay and rock, gravel, gravelly clay. Some serpentine. Paved parking area along Spear; Bldg.702.	Trace Chrysotile	N
AD4-25	11/24/86	Yes	Gravelly silt; silt with serpentine; sand and fractured rock, white fractured rock, silty and fractured serpentine. Yard with asphalt surface.	Trace Chrysotile	N
AD4-26	11/24/86	No	Fine sand. Coarse sand. Sand, silt. Possibly permeated with oil. Fill area west of "J" Street.	ND	
AD4-27	11/24/86	No	Sandy gravel; silt; gravel; silty sand with serpentine. Fill area west of "J" Street.	1-5 Chrysotile	N
AE2-01	12/3/86	No	Gravelly sand; gravelly, silty clay; gravelly sand and rock. Paved drive between Buildings 368 and 369.	ND	

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
AE2-02	12/3/86	No	Gravelly sandy silt; sandy gravel; rock; Asphalt parking lot on shore.	1-5 Chrysotile	N
AE2-03	12/3/86	No	Sandy gravel; gravelly sand; sand and shell and rock fragments. Asphalt parking lot on shore.	ND 5-15 Zeolite	
AE2-04	12/3/86	No	Fine gravel and sand; fine sand and gravel; silty serpentine and rock fragments; sand and gravel. Asphalt yard on shore.	15-25 Actinolite	N
AE3-01	11/18/86	No	Sandy soil, silt, rock. By Building 500 in grass field.	ND	
AE3-02	11/17/86	No	Clay, gravel. Lighter gray material - but probably non-asbestos. West of Building 505.	ND	
AE3-03	11/18/86	No	Gravel, sandy silt possibly full brownish serpentine rock present. "H" Street.	Trace Chrysotile	N
AE3-04	11/18/86	No	Gravel, sand, rock. Parking lot-paved.	ND	
AE3-05	11/17/86	No	Gravel, coarse sand, sand, clay. East of Building 505.	1-10 Chrysotile	N
AE3-06	11/17/86	No	Gravel, clay, no suspect. "H" Street, in pavement.	ND	
AE3-07	11/17/86	No	Clay and rock sample from ~1' and 5' depth. No obvious suspect material. Location immediately to west of building foundation.	Trace Chrysotile	N

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
AE3-08	11/17/86	No	Rock, clay at top near soil, sand bottom. Some white deposit from rock impact.	Trace Chrysotile	N
AE3-08 SAND	11/17/86	No	Sand layer under clay. Possibly sandblasting sand - may be from cleaning operation.	ND	
AE3-09	11/24/86	No	Silty sand, sand, clay; gravel; silty clay; gravelly sand. 100' west of Hussey by old transformer.	ND	
AE3-10	12/3/86	No	Silt; silt and gravel; gravelly silt. Some serpentine in fill. Asphalt drive.	ND 1-5 Zeolite	
AE4-01	11/20/86	No	Asphalt surface, gravelly clay, fill . Serpentine in last 12 inches.	1-5 Chrysotile	N
AE4-02	11/19/86	No	Gravelly clay with serpentine rock; gravelly sand, rock; Drive to storage yard.	1-5 Chrysotile	N
AE4-02-SAND	11/19/86	No	Sand at ~4-1/2 depth. Possibly fill. Sandblast sand may be source.	ND	
AE4-03	11/19/86	No	Compacted fine silt with serpentine; sand and fractured gravel; gravelly clay; paved parking area on "R" Street.	Trace Chrysotile	N
AE4-04	11/18/86	No	Gravel, serpentine, coarse sand at top; clay and tight silt at bottom. Road in yard.	Trace Chrysotile	N
AE4-05	11/19/86	No	Silt, sand, gravel-packed; clay and silt; shell; clay. Paved storage parking lot.	1-5 Chrysotile	N

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
AE4-06	11/19/86	No	Compacted gravel and silt - crumbles; fine sand and gravel - gray; rock. Dirt covered storage yard. Possibly rock.	Trace Chrysotile	N
AE4-07	11/19/86	No	Coarse sand and gravel; tight silty sand; rock; clay and rock and shell. Paved parking lot.	1-5 Chrysotile	N
AE4-08	11/19/86	No	Silt and gravel; some serpentine; gravel and sand; gravel, sand, serpentine rock. Paved parking lot.	1-10 Chrysotile	N
AE4-09	11/18/86	No	Serpentine rock, coarse sand, gravel at top; clay at bottom. Paved area.	1-10 Chrysotile	N
AE4-10	11/18/86	No	Bay mud at bottom - tight clay, sandy soil with gravel near top. By gas station; in street.	1-5 Chrysotile	N
AE4-11	11/18/86	No	Sandy loam, clay, tight silt, gravel in some layers. South end Building 500, by "I" Street.	1-5 Chrysotile	N
AE4-12	11/24/86	No	Sand and fractured rock; sandy and some gravel and wire; sandy gravel. Fill area west of "J" Street by BB Field.	1-10 Chrysotile Trace Amosite	M
AF3-01	11/17/86	Yes	White chalky material in brown soil. Suspect asbestos. Sample from full length. (Clay)	1-10 Chrysotile	N
AF3-02	11/17/86	Yes	White chalky material from impact of sampler with rock. Sample from full length (Clay)	Trace Chrysotile	N
AF3-03	11/17/86	No	Fibrous plant-like material, sandy soil.	ND	
AF4-01	11/18/86	No	Gravel, serpentine rock, sandy soil. No suspect ACM. Pavement in "I" Street.	ND	

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
BB2-01	12/1/86	Yes (Natural)	Clay; silty gravel; clay and gravel; clay and serpentine; white veins. Paved drive between Building 121-122.	1-10 Chrysotile	N
BB2-02	12/2/86	No	Silty clay and gravel; gravelly sand; rock and sand. Asphalt covered yard. Near shore.	1-10 Chrysotile	N
BB2-03	12/2/86	No	Sand; sandy gravel; silty gravel; sand; clay and gravel. Fill. Asphalt covered yard. Near shore.	1-5 Chrysotile	M
BB2-04	12/1/86	No	Sandy gravel; silty fractured rock; clay and rock, gravelly sand; clay. Gravel storage area on perimeter.	1-10 Chrysotile	N
BB2-05	12/1/86	No	Clay; rock; silt clay and gravel; clay and rock. Paved drive and parking lot.	ND	
BB2-06	12/2/86	No	Gravelly sand; gravel and clay; rock; silt and serpentine; sandy silt. Asphalt covered yard.	1-5 Chrysotile	N
BB2-07	12/2/86	No	Sand and asphalt and rock fill; clay and gravel; clay and gravel fill. Asphalt covered yard. Near shore.	1-10 Chrysotile	M
BB2-08	12/2/86	No	Sand; sandy clay and fragmented rock; gravelly sand; clay and rock fragments. Asphalt covered yard.	1-10 Chrysotile	N
BB2-09	12/2/86	No	Sand and fractured rock; clay and serpentine and fractured rock; gravelly silt; gravelly clay. Asphalt covered yard.	1-5 Chrysotile	N
BB2-10	12/2/86	No	Coarse sand; clay and gravel; silty clay and gravel; sandy clay and rock; clay and rock. Asphalt covered yard by shore.	1-10 Chrysotile	M

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
BB2-11	12/2/86	No	Gravelly sand; clay and gravel; fine rock fragments; clay; odor of organics. Asphalt covered yard.	1-5 Chrysotile	M
BB3-01	12/2/86	No	Clay; sandy silt and serpentine; gravelly coarse sand; serpentine at bottom. Sandy yard outside Building 116.	5-15 Chrysotile	N
BC2-01	12/2/86	No	Silty loam; serpentine rock; rock. Grassy lawn outside Building 110.	1-5 Chrysotile	N
BC2-02	12/3/86	No	Silty sand and gravel; clay; silty serpentine; silty serpentine material. Asphalt parking lot by Building 101.	ND	
BC2-03	12/3/86	Yes (Natural)	Serpentine containing silt-clay; white bands in serpentine; gravel; serpentine. Asphalt parking lot by Building 101.	1-10 Chrysotile	N
BC2-04	12/3/86	No	Clay; rock and clay; serpentine and silt; rock. Asphalt parking lot by Building 134.	ND	
BC3-01	11/25/86	No	Silty sand and serpentine; sand and serpentine; gravelly sand. Gravel storage yard.	1-5 Chrysotile	N
BC3-02	11/26/86	No	Gravelly sand, sandy silt with serpentine; sand; Parking lot west of Building 813.	Trace Chrysotile	N
BC3-04	11/26/86	No	Gravelly clay; silty gravel; rock. Asphalt parking area outside fence; by Building 813.	Trace Chrysotile	N
BC4-01	11/25/86	No	Gravelly sand; gravelly clay; gravelly sand; fractured rock. Asphalt-yard covered with asphalt.	ND	

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
BC4-02	11/25/86	No	Gravelly sand; gravel and sandy silt; gravelly clay; sand. Gravel covered yard.	ND	
BD4-01	11/24/86	No	Gravelly sand; silt and soft serpentine - fractures easily. Asphalt lot.	1-5 Chrysotile	N
BD4-02	11/25/86	No	Gravelly sand; silty sand; silty sand and serpentine. Gravel covered yard.	1-5 Chrysotile	N
BE2-01	12/1/86	No	Silty gravel and rock; gravelly silt; silty gravel and serpentine. Asphalt drive and parking lot.	ND	
BE2-02	12/3/86	No	Sandy gravel - fill material; gravelly sand. Middle of south pier; asphalt cover.	ND	
BE3-01	11/25/86	No	Asphalt drive between Building 406 and 413. Sandy silt and fractured rock; clay and rock and shell; sandy silt.	Trace Chrysotile	N
BE3-02	11/25/86	No	Gravelly sand; clay and fractured rock; clay; gravelly clay and rock. Hussey Street by Building 439; asphalt surface.	ND	
BE3-03	11/25/86	No	Silty sand and fractured rock; gravel and sand; gravelly sand. Cochrane and Manseau Street.	ND	
BE3-04	11/26/86	No	Silty topsoil and roots; gravelly clay; clay and sandstone; clay and serpentine. Asphalt parking lot.	1-5 Chrysotile	N
BE3-05	11/25/86	No	Silty sand and fractured rock; gravelly sand; sandy gravel. Sandy, propeller storage yard.	ND	

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
BE3-06	12/1/86	No	Sand fine gravel; sand and gravel; silty clay and serpentine fractured rock. Asphalt drive and parking lot.	ND	
BF2-01	12/1/86	No	Gravelly silty clay; sandy silt and serpentine; sand. Paved crane track to Berth 20.	ND	
BF2-02	12/1/86	No	Silty clay and fragrock; sandy silt and gravel; silty clay and gravel; sandy gravel. Asphalt drive and parking lot.	ND	
BF3-01	11/26/86	Yes (Natural)	Clay and gravel and suspect ACM at 2' depth; gravel and sand; sandy gravel. Open field near steam plant.	1-5 Chrysotile	M
BF3-02	11/26/86	No	Silty and serpentine fractures; sandy gravel; silt and serpentine; gravel. Field by building foundation.	Trace Chrysotile	N
BF3-02 LAYERED	11/26/86	No	Rock in top 2' of building. Fractures in thin <1/16" layers; possibly fracturing to produce fibrous material.	ND	
BF3-03	11/26/86	No	Sand; silt and gravel; sandy gravel; fractured rock and silt. Road - rock drive East of steam plant.	ND	
BF3-04	11/26/86	No	Abandoned asphalt drive. Compressed layered sand; gravelly and fractured rock.	ND	
BF3-05	11/26/86	No	Sandy gravel; sand; sand and fine gravel and shell fragments. Abandoned paved parking lot.	ND	
BF3-06	12/1/86	No	Gravel and sandy silt; gravelly sand. Gravel drive.	1-5 Chrysotile	N

(4-10)

SOIL SAMPLE LOG AND RESULTS

Sample Number	Date Collected	Suspect ACM Visible	Description/Comments	Asbestos Content (%)	Source M=man-made N=natural
BF3-07	11/26/86	Yes (Natural)	Silty and gravel and suspect with material; sand and fractured rock; sand and gravel; clay. Gravel drive by Building 325.	Trace Chrysotile	
BF3-08	11/26/86		Sandy and gravel; sand and fine gravel; beach sand and shells. Gravel yard at Hussey and Mahan.	ND	
BF3-09	12/1/86	No	Gravel and serpentine rock fragments and clay; fragmented rock, sand. Gravel storage yard.	ND	
BF3-10	12/1/86	No	Gravelly sand; sand; gravelly sand; sand; beach sand and shell fragments. Gravel drive.	ND	
BG3-01	12/1/86	No	Sand; beach sand; beach sand and shell and pebbles. Gravel drive.	ND	
NAT ROCK FORM	11/25/86	No	Natural rock formation; rock outcropping on hillside above Building 813.		

(4-11)

APPENDIX V

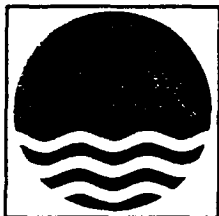
LABORATORY DATA SHEETS

Bulk Sampling Results
Air Sampling Results

Galson

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77 8th Street
Oakland, CA 94607
(415) 763-1677



Environmental Sciences
Division

Client: EMCON/HUNTERS PT Job #: S6-518
Date Sampled: not spec Date Analyzed: 12/15/86
mm cassette: 25 mm Field Size: 0.00785 sq mm

Client's I.D.	Galson I.D.	Volume (L)	Total Fibers	Possible Asbestos Fibers	Number of Fields	Total Fibers per cc	Comments
HP-01	7571	754	1.5	NI	100	<0.004	
HP-02	7572	862	1.5	NI	100	<0.003	
HP-03	7573	700	1	NI	100	<0.004	There was a lot of debris on the filter.
BK:11-26-86	7574	0	0	NI	100	NA	blank
BK:11-19-86	7575	0	0	NI	100	NA	blank

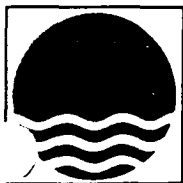
Method #: NIOSH 7400

NI= not identified

<= less than

NA= not applicable

Analyst: *Cf for MPD*
Approved by: *Cf*



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Tel: (315) 432-0506

LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86111406

Location: HUNTERS POINT

Date Sampled: 13-NOV-1986

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
505-SHW-1	D26605	20-30	CHRYSTILE	ND	NA	M
503-TRANSITE-2	D26606	20-30	CHRYSTILE	ND	NA	M
503-PLASTER-2	D26607	1-5	CHRYSTILE	5-15	SYNTHETIC	M
503-DEBRIS-2	D26608	45-55 30-40	AMOSITE CHRYSTILE	ND	NA	M
503-PREF-2	D26609	35-45	CHRYSTILE	ND	NA	M
507-PREF-3	D26610	50-60 15-25	CHRYSTILE AMOSITE	ND	NA	M
507-PLAS-3	D26611	NO VISIBLE FIBERS PRESENT				
520-PLAS-4	D26612	ND	NA	1-10	CELLULOSE	
520-TRANSITE-4	D26613	20-30	CHRYSTILE	ND	NA	M
DEBRIS-5	D26614	ND	NA	30-40 10-20	CELLULOSE SYNTHETIC	
CLOTH-6	D26615	90-100	CHRYSTILE	ND	NA	M
TRANSITE-6	D26616	NO VISIBLE FIBERS PRESENT				

Method(s): EPA-600/M4-82-020

Footnotes: M = Manmade Origin

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by: T.J. BIEL

Approved by: [Signature]

Date: 14-NOV-1986



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86111406

Location: HUNTERS POINT

Date Sampled: 13-NOV-1986

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
PREF DEBRIS-7	D26617	65-75 1-10	AMOSITE CHRYSTILE	ND	NA	M
DEBRIS-8	D26618	75-85	AMOSITE	ND	NA	M
DEBRIS-9	D26619	45-55 15-25	AMOSITE CHRYSTILE	ND	NA	M
STEAM-10	D26620	65-75 5-15	AMOSITE CHRYSTILE	ND	NA	M
PREF-11	D26621	50-60 15-25	CHRYSTILE AMOSITE	ND	NA	M

Method(s): EPA-600/MA-82-020

Footnotes: M = Manmade Origin

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

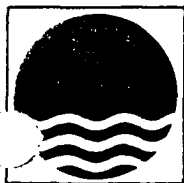
ND - Not Detectable

NS - Not Specified

Submitted by: T.J. BIEL

Approved by: *[Signature]*

Date: 14-NOV-1986



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518-LL

Task Number: 86112123

Location: HUNTERS POINT

Date Sampled: 11/17-19/86

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
LAG/DEB-13	D27038	TRACE	CHRYSTILE	ND	NA	M
DEBRIS-14	D27039	65-75 1-10	AMOSITE CHRYSTILE	ND	NA	M
AF3-1	D27040	1-10	CHRYSTILE	ND	NA	N
AF3-2	D27041	TRACE	CHRYSTILE	ND	NA	N
AF3-3	D27042	ND	NA	20-30	CELLULOSE	
AE3-8	D27043	TRACE	CHRYSTILE	1-5	CELLULOSE	N
AE3-8 SAND	D27044	ND	NA	TRACE	ZEOLITE	
AE3-7	D27045	TRACE	CHRYSTILE	ND	NA	N
AE3-6	D27046	**ND	NA	ND	NA	
AE3-5	D27047	1-10	CHRYSTILE	ND	NA	N
AE3-2	D27048	**ND	NA	ND	NA	

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M- MAN MADE ASBESTOS MATERIAL

N- NATURAL ASBESTOS MATERIAL

** NO VISIBLE FIBERS

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

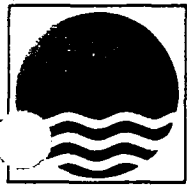
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Submitted by: J. J. J.

Approved by: J. J. J.

Date: 1-DEC-1986

Page: 2 of 2



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518-LL

Task Number: 86112122

Location: HUNTERS POINT

Date Sampled: NS

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
503-VAT-2	D27016	1-5	CHRYSTILE	ND	NA	M
503-ROOF-PAPER-2	D27017	1-5 1-5	CHRYSTILE AMOSITE	TRACE	MINERAL WOOL	M
AE3-3	D27018	TRACE	CHRYSTILE	TRACE	GLASS FIBERS	N
AF4-1	D27019	ND	NA	TRACE	GLASS FIBERS	
AE3-4	D27020	**ND	NA	ND	NA	
AE3-1	D27021	ND	NA	TRACE	CELLULOSE	
AE4-11	D27022	1-5	CHRYSTILE	1-5	CELLULOSE	N
AE4-10	D27023	1-5	CHRYSTILE	5-15	ZEOLITE	N
AE4-9	D27024	1-10	CHRYSTILE	ND	NA	N
AE4-4	D27025	TRACE	CHRYSTILE	ND	NA	N

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M-MAN MADE ASBESTOS MATERIAL
N-NATURAL ASBESTOS

** NO VISIBLE FIBERS

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

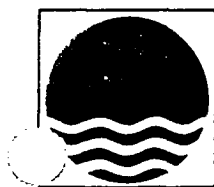
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Submitted by: *[Signature]*

Approved by: *[Signature]*

Date: 1-DEC-1986

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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518-LL

Task Number: 86112123

Location: HUNTERS POINT

Date Sampled: 11/17-19/86

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
AD4-21	D27026	ND	NA	1-5	ZEOLITE	
AD4-20	D27027	TRACE	CHRYSTOTILE	ND	NA	N
AD4-22	D27028	1-5	CHRYSTOTILE	1-5	ZEOLITE	N
AE4-5	D27029	1-5	CHRYSTOTILE	TRACE	ZEOLITE	N
AE4-8	D27030	1-10	CHRYSTOTILE	ND	NA	N
AE4-7	D27031	1-5	CHRYSTOTILE	TRACE	ZEOLITE	N
AE4-6	D27032	TRACE	CHRYSTOTILE	ND	NA	N
AE4-3	D27033	TRACE	CHRYSTOTILE	ND	NA	N
AE4-2	D27034	1-5	CHRYSTOTILE	ND	NA	N
AE4-2 SAND	D27035	ND	NA	TRACE	CELLULOSE	
6/7-LAG/DEB-12	D27036	85-95	CHRYSTOTILE	ND	NA	M
6/7-TRANSITE-12	D27037	25-35 15-25	CROCIDOLITE CHRYSTOTILE	ND	NA	M

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M- MAN MADE ASBESTOS MATERIAL
N- NATURAL ASBESTOS MATERIAL

Trace - Less Than 1%
µg - Micrograms
($<$) - Less Than
($>$) - Greater Than
NA - Not Applicable
ND - Not Detectable
NS - Not Specified

Submitted by: J. B. L.

Approved by: [Signature]

Date: 1-DEC-1986

Page: 1 of 2



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86112415

Location: HUNTERS POINT

Date Sampled: 20-NOV-1986

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
AE4-1	D27191	1-5	CHRYSTILE	ND	NA	N
AD4-16	D27192	**ND	NA	ND	NA	
AD4-15	D27193	**ND	NA	NA	NA	
AD4-10	D27194	TRACE	CHRYSTILE	ND	NA	N
AD4-11	D27195	1-10	CHRYSTILE	ND	NA	N
AD4-11 BOILER LAGGING	D27196	60-70	CHRYSTILE	1-10	MINERAL WOOL	M
AD4-17	D27197	TRACE	AMOSITE	ND	NA	M
AD4-18	D27198	1-5	CHRYSTILE	1-5	ZEOLITE	N
AD4-13	D27199	1-10	CHRYSTILE	ND	NA	N
AD4-14	D27200	TRACE	CHRYSTILE	ND	NA	N
AD4-19	D27201	1-5	CHRYSTILE	TRACE	ZEOLITE	N

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M-MAN MADE ASBESOTS
N-NATURAL ASBESOTS

** NO VISIBLE FIBERS

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

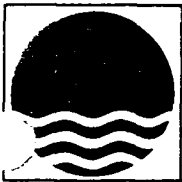
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Submitted by: T. J. ...

Approved by: [Signature]

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Page: 1 OF 1



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86112411

Location: HUNTERS POINT

Date Sampled: 21-NOV-1986

BULK ASBESTOS

Sample ID	Lab ID	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
PLAS-A	D27162	ND	NA	1-5	CELLULOSE	
CT-B	D27163	ND	NA	25-35 45-55	CELLULOSE MINERAL WOOL	
TARPAPER-C	D27164	ND	NA	50-60 5-15	CELLULOSE MINERAL WOOL	
SHIN-D	D27165	5-15	CHRYSTILE	1-5	CELLULOSE	M
AD4-24	D27166	TRACE	CHRYSTILE	ND	NA	N
AD4-8	D27167	1-5	CHRYSTILE	ND	NA	N
AD4-9	D27168	10-20	CHRYSTILE	ND	NA	N
AD4-23	D27169	1-5	CHRYSTILE	ND	NA	N
DEB-14	D27170	20-30 1-10	CHRYSTILE AMOSITE	ND	NA	M
AD4-12	D27171	1-5	CHRYSTILE	1-5	CELLULOSE	N
AD4-7	D27172	1-5	CHRYSTILE	ND	NA	N
AD4-6	D27173	1-5	CHRYSTILE	ND	NA	N

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M- MAN MADE ASBESTOS

N- NATURAL ASBESTOS

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by: T. B. C.

Approved by: J. J. C.

Date: 1-DEC-1986

Page: 1 OF 2



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86112411

Location: HUNTERS POINT

Date Sampled: 21-NOV-1986

BULK ASBESTOS

Sample ID	Lab ID	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
AD4-5	D27174	1-5	CHRYSTILE	ND	NA	N
AD4-5 FIBROUS	D27175	50-60	CHRYSTILE	ND	NA	M
AD4-5 INSULATION	D27176	60-70	CHRYSTILE	ND	NA	M
AD4-1	D27177	TRACE	CHRYSTILE	1-5	CELLULOSE	N

Trace - Less Than 1%
µg - Micrograms
(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not Detectable
NS - Not Specified

Method(s): EPA-600/M4-82-020

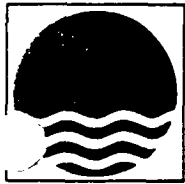
Footnotes: ORIGIN: M- MAN MADE ASBESTOS MATERIALS
N- NATURAL ASBESTOS

Submitted by: [Signature]

Approved by: [Signature]

Date: 1-DEC-1986

Page: 2 OF 2



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LABORATORY ANALYSIS REPORT

Client: EMCQN/HUNTERS POINT

Task Number: 86120117

Location: HUNTERS PT.

Job Number: S6518LL

Date Sampled: NS

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORGIN
AD4-2	D27379	TRACE	CHRYSTILE	ND	NA	N
AD4-26	D27380	ND	NA	TRACE	CELLULOSE	
AD4-27	D27381	1-5	CHRYSTILE	1-5	ZEOLITE	N
A34-12	D27382	1-10 TRACE	CHRYSTILE AMOSITE	ND	NA	M
AE3-9	D27383	ND	NA	TRACE	ZEOLITE	
AC4-1	D27384	1-5	CHRYSTILE	ND	NA	N
CLOTH-20	D27385	5-15	CHRYSTILE	50-60 1-10	CELLULOSE SYNTHETIC	M
DEB-20	D27386	40-50 10-20	AMOSITE CHRYSTILE	ND	NA	M
LAG/DEB-21	D27387	70-80	CHRYSTILE	ND	NA	M
LAG-22	D27388	65-75 1-10	AMOSITE CHRYSTILE	ND	NA	M
AD4-25	D27389	TRACE	CHRYSTILE	10-20	ZEOLITE	N

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: N- NATURAL ASBESTOS

M- MAN MADE ASBESTOS MATERIALS

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by: [Signature]

Approved by: [Signature]

Date: 2-DEC-1986



Galson

Technical Services, Inc.

6601 Kirkville Road
Post Office Box 546
E. Syracuse, N.Y. 13057
Tel: (315) 432-0506

LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT
Task Number: 86120118
Location: HUNTERS PT.

Job Number: S6518LL
Date Sampled: NS

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
DEB-E	D27393	1-10 75-85	AMOSITE CHRYSTOTILE	ND	NA	M
TRANS/TILE-F	D27394	25-35	CHRYSTOTILE	TRACE	MINERAL WOOL	M
PLAS-F	D27395	TRACE	AMOSITE	1-10	CELLULOSE	M
DEB/FG-G	D27396	85-95	AMOSITE	ND	NA	M
VAT-G	D27397	NA	NA	TRACE	CELLULOSE	
TRANS/TILE-G	D27398	15-25	CHRYSTOTILE	ND	NA	M
PLAS-G	D27399	ND	NA	5-15	CELLULOSE	M
LAG/DEB-H	D27400	ND	NA	25-35 1-10 1-5	SYNTHETIC CELLULOSE MINERAL WOOL	N

Trace - Less Than 1%
µg - Micrograms
(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not Detectable
NS - Not Specified

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M-MAN MADE ASBESTOS MATERIAL
N-NATURAL ASBESTOS MATERIAL

Submitted by: T. A. BIEL
Approved by: [Signature]
Date: 2-DEC-1986

Page:1 OF 1



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86120117

Location: HUNTERS PT.

Date Sampled: NS

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORGIN
AD4-4	D27390	1-5	CHRYSTILE	ND	NA	N
AD4-3	D27391	1-5	CHRYSTILE	ND	NA	N
BD4-1	D27392	1-5	CHRYSTILE	5-15	ZEOLITE	N

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: N:NATURAL ASBESTOS

M:MANMADE ASBESTOS MATERIALS

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by: J. J. GEL

Approved by: J. J. GEL

Date: 2-DEC-1986

Page: 2 OF 2

LABORATORY ANALYSIS REPORT


Galson

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Client: EMCON/HUNTERS POINT

Task Number: 86120121

Location: HUNTERS PT.

Job Number: S6518LL

Date Sampled: 26-NOV-1986

BULK ASBESTOS

Sample ID	Lab ID	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
BD4-2	D27414	1-5	CHRYSTILE	ND	NA	N
BC4-2	D27415	** ND	NA	ND	NA	
BC4-1	D27416	**ND	NA	1-5	ZEOLITE	
BE3-1	D27417	TRACE	CHRYSTILE	10-20	ZEOLITE	N
BE3-3	D27418	**ND	NA	ND	NA	
BE3-2	D27419	**ND	NA	1-5	ZEOLITE	
BE3-5	D27420	**ND	NA	ND	NA	
BC3-1	D27421	1-5	CHRYSTILE	ND	NA	N

Trace - Less Than 1%
 (<) - Less Than
 (>) - Greater Than
 NA - Not Applicable
 ND - Not detectable
 NS - Not specified

Method(s): EPA 600/M4-82-020

 Footnotes: ORIGIN: M-MAN MADE ASBESTOS MATERIALS
 N-NATURAL ASBESTOS

** NO VISIBLE FIBERS

Submitted by: J. B. L.

Approved by: J. B. L.

Date: 4-DEC-1986

Page 1 of 1

LABORATORY ANALYSIS REPORT

**Galson**

Technical Services, Inc.

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E. Syracuse, N.Y. 13057
Tel: (315) 432-0506

Client: EMCON/HUNTERS POINT

Job Number: S6518.10LL

Task Number: 86120123

Location: HUNTERS PT.

Date Sampled: 11/25/86

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
DEB-1	D27426	55-65 1-5	AMOSITE CHRYSTILE	ND	NA	M

(<) - Less Than
(>) - Greater Than

NA - Not Applicable
ND - Not Detectable
NS - Not Specified

Footnotes: EPA 600/M4-82-020

ORIGIN: M MAN MADE ASBESTOS MATERIALS
N NATURAL ASBESTOS

Submitted by: J. J. G. F.

Approved by: *[Signature]*

Date: 2-DEC-1986

Page 1 of 1



Galson

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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518.10LL

Task Number: 86120122

Location: HUNTERS PT.

Date Sampled: 11/26/86

BULK ASBESTOS

Sample ID	Lab ID	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
TRANS/P1-5	D27422	15-25 5-15	CHRYSTILE CROCIDOLITE	ND	NA	M
CLOTH-K	D27423	60-70	CHRYSTILE	15-25	SYNTHETIC	M
WPFIG-K	D27424	70-80	CHRYSTILE	1-5	BRUCITE	M
SHIRK-K	D27425	1-5	CHRYSTILE	5-15	CELLULOSE	M

Method(s): EPA 600/M4-82-020

Footnotes: ORIGIN: M- MAN MADE ASBESTOS MATERIAL
N- NATURAL ASBESTOS MATERIAL

Trace - Less Than 1%

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not detectable

NS - Not specified

Submitted by: [Signature]

Approved by: [Signature]

Date: 4-DEC-1986

Page 1 of 1



Galson

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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86120120

Location: HUNTERS PT.

Date Sampled: 26-NOV-1986

BULK ASBESTOS

Sample ID	Lab ID	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
BC3-2	D27403	*TRACE	CHRYSTILE	NA	NA	N
BC3-4	D27404	*TRACE	CHRYSTILE	NA	NA	N
BE3-4	D27405	1-5	CHRYSTILE	1-5	ZEOLITE	N
BF3-2	D27406	TRACE	CHRYSTILE	ND	NA	N
BF3-2 LAYER	D27407	**ND	NA	ND	NA	
BF3-1	D27408	1-5	CHRYSTILE	5-15 1-5	CELLULOSE ZEOLITE	M
BF3-3	D27409	**ND	NA	1-5 TRACE	ZEOLITE CELLULOSE	
BF3-4	D27410	**ND	NA	TRACE	CELLULOSE	
BF3-7	D27411	TRACE	CHRYSTILE	1-5	CELLULOSE	
BF3-8	D27412	**ND	NA	1-5	ZEOLITE	
BF3-5	D27413	**ND	NA	1-5	ZEOLITE	

Trace - Less Than 1%
µg - Micrograms
($<$) - Less Than
($>$) - Greater Than
NA - Not Applicable
ND - Not Detectable
NS - Not Specified

Method(s): EPA-600/M4-82-020

Footnotes: ORIGIN: M-MAN MADE ASBESTOS MATERIALS
N-NATURAL ASBESTOS

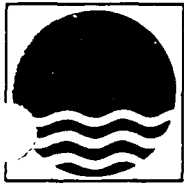
** NO VISIBLE FIBERS

Submitted by: T. D. B. EL

Approved by: ECR

Date: 3-DEC-1986

Page: 1 OF 1



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86120416

Location: HUNTER'S POINT

Date Sampled: 01-DEC-1986

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
BF3-6	D27721	1-5	CHRYSTILE	ND	NA	N
BF3-10	D27722	ND	NA	1-2 1-2	CELLULOSE ZEOLITE	
BG3-1	D27723	ND	NA	TRACE	ZEOLITE	
BF2-1	D27724	NO VISIBLE FIBERS PRESENT				
BF3-9	D27725	NO VISIBLE FIBERS PRESENT				
BF2-2	D27726	NO VISIBLE FIBERS PRESENT				
BE3-6	D27727	NO VISIBLE FIBERS PRESENT				
BB2-5	D27728	NO VISIBLE FIBERS PRESENT				
BE2-1	D27729	ND	NA	1-5	ZEOLITE	
BB2-4	D27730	1-10	CHRYSTILE	ND	NA	N
BB2-1	D27731	1-10	CHRYSTILE	ND	NA	N

Method(s): EPA 600/M4-82-020

Footnotes: N = NATURAL ORIGIN

M = MANMADE ORIGIN

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by:

Approved by: *Eric Nolan*

Date: 10-DEC-1986



Galson

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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86120411

Location: HUNTERS POINT

Date Sampled: 02-DEC-1986

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
BB2-2	D27681	1-10	CHRYSTILE	ND	NA	N
BB2-3	D27682	1-5	CHRYSTILE	ND	NA	M
BB2-7	D27683	1-10	CHRYSTILE	1-10	CELLULOSE	M
BB2-9	D27684	1-5	CHRYSTILE	ND	NA	N
BB2-10	D27685	1-10	CHRYSTILE	ND	NA	M
BB2-11	D27686	1-5	CHRYSTILE	ND	NA	M
BB2-8	D27687	1-10	CHRYSTILE	ND	NA	N
BB2-6	D27688	1-5	CHRYSTILE	ND	NA	N
BB3-1	D27689	5-15	CHRYSTILE	ND	NA	N
BC2-1	D27690	1-5	CHRYSTILE	TRACE	CELLULOSE	N

Method(s): EPA 600/M4-82-020

Footnotes: N = NATURAL ORIGIN

M = MANMADE ORIGIN

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by:

Approved by:

Date: 10-DEC-1986



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LABORATORY ANALYSIS REPORT

Client: EMCON/HUNTERS POINT

Job Number: S6518LL

Task Number: 86120417

Location: HUNTER'S POINT

Date Sampled: 03-DEC-1986

BULK ASBESTOS

SAMPLE ID	GTS #	% ASBESTOS	ASBES TYPE	% OTHER	OTHER TYPE	ORIGIN
BC2-3	D27732	1-10	CHRYSTILE	ND	NA	N
BC2-2	D27733	NO VISIBLE FIBERS PRESENT				
BC2-4	D27734	NO VISIBLE FIBERS PRESENT				
BE2-2	D27735	NO VISIBLE FIBERS PRESENT				
AE3-10	D27736	ND	NA	1-5	ZEOLITE	
AE2-2	D27737	1-5	CHRYSTILE	ND	NA	N
AE2-3	D27738	ND	NA	5-15	ZEOLITE	
AE2-4	D27739	15-25	ACTINOLITE	ND	NA	N
AD2-1	D27740	ND	NA	1-5	CELLULOSE	
AE2-1	D27741	NO VISIBLE FIBERS PRESENT				

Method(s): EPA 600/M4-82-020

Footnotes: N = NATURAL ORIGIN

M = MANMADE ORIGIN

Trace - Less Than 1%

µg - Micrograms

(<) - Less Than

(>) - Greater Than

NA - Not Applicable

ND - Not Detectable

NS - Not Specified

Submitted by:

Approved by:

Date: 10-DEC-1986

APPENDIX VI

FIELD DATA SHEETS

Bulk Sampling Results
Air Sampling Results

PROJECT NAME EMCON/ HUNTERS POINT
 GALSON REPORT # SG-510.
 JOB LOCATION HUNTERS POINT NAVAL
SHIPYARD.

FILTER SIZE 25mm METHOD # 7400
 FIELD SIZE .00765mm² BLANK # BR

⊕ SAMPLE LOCATIONS

SAMPLE LOCATION	MOBILE	MOBILE	MOBILE	MOBILE							
DATE	11/19/86	11/24/86	11/26/86	12/2/86							
FT. ABOVE FLOOR	4 1/2'	5'	4 1/2'	4 1/2'							
SAMPLE ID	01-HP	HP-02	HP-03	HP-04							
PUMP ID	152	152	155	152							
FLOW RATE (LPM)	2.00	2.00	2.00	2.00							
TIME ON	9:15	8:49	9:20	9:05							
TIME OFF	15:32	16:00	15:10	PUMP							
SAMPLE TIME (MIN)	377	431	350	DISCH.							
SAMPLE VOL (L)	754	862	700	—							
# of Fiber Counted	<5.5	<5.5	<5.5								
# of Fields Counted	100	100	100								
total fiber/cc	<.004	<.003	<.004								
+/- 95% fiber/cc	.002	.002	.002								
% POSSIBLE ASBESTOS	NI	NI	NI.		NI = NOT IN COUNTING FIELDS.						

COMMENTS: [11/19/86.]
 SAMPLE ON EMCEN PICKUP TRUCK NS' FROM WORK STATION ON TAILGATE.
 POSSIBLE DUST SOURCES: CEMENT BAGS, DUST FROM YARD. VARIOUS PARTS OF YARD WEST OF
 "I" STREET. [11/24/86]: ON DRILLING RIG; PUMP ON UNTIL PUMP DISCHARGED. ASSUME OFF @ 16:00 -
 WORST CASE SAMPLE RESULT. [11/26/86]: EMCEN TRUCK. 12/2/86: EMCEN TRUCK - PUMP DISCHARGED;
 NO SAMPLE.

DATE: 11/19/86.

INDUSTRIAL HYGIENIST: PHIL NUMOTO.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
505 - SHIN-1	11/13/86	PTN	SURFACE	YES	BLONG 505 - 150' X 200' X 20' SHINGLE USED ON SIDES OF BLONG. POSSIBLY TRANSITE.	20-30% CHAMOSITE
503 - DEBRIS-2	11/13/86	PTN	SURFACE	YES	PROBABLY CRUSHED PIPE LAGGING. BLONG 503 (DEMOLISHED)	45-50% AMOSITE 30-40% CHAMOSITE
503 - PREF-2	11/13/86	PTN	SURFACE	YES	PREFORM PIPE INSULATION, 4" DIAM. BLONG 503 (DEMOLISHED)	35-40% CHAMOSITE
503 - TRANSITE-2	11/13/86	PTN	SURFACE	YES	SHINGLE - LIKE MATERIAL - TRANSITE(?) BLONG 503 (DEMOLISHED)	20-30% CHAMOSITE
503 - PLASTER-2	11/13/86	PTN	SURFACE	YES	PLASTER ON WIRE MESH BLONG 503 (DEMOLISHED)	1-5% CHAMOSITE
507 - PLASTER-3	11/13/86	PTN	SURFACE	YES	PLASTER ON WIRE MESH BLONG 507 (DEMOLISHED)	N.D.
507 - PREF-3	11/13/86	PTN	SURFACE	YES	PREFORM INSULATION BLONG 507 (DEMOLISHED)	15-25 AMOSITE 50-60 CHAMOSITE
520 - PLASTER-4	11/13/86	PTN	SURFACE	YES	PLASTER ON WIRE MESH BLONG 507 520 (DEMOLISHED)	N.D.
520 - TRANSITE-4	11/13/86	PTN	SURFACE	YES	TRANSITE SHINGLE MATERIAL BLONG 520 (DEMOLISHED)	20-30% CHAMOSITE
DEBRIS 5	11/13/86	PTN	SURFACE	YES	DEBRIS ON GROUND. FIBERS, GYPSUM LIKE MATERIALS.	N.D.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
CLOTH 6	11/13/86	PTN	SURFACE	YES	COARSE CLOTH - POSS. ASBESTOS CLOTH.	90-100% CHRYSTOLITE
TRANSITE 6	11/13/86	PTN	SURFACE	YES	PILE OF DEBRIS ON BOARD BY RR TRACKS. POSS. TRANSITE BOARD.	NO VISIBLE FIBERS
PREF DEBRIS 7	11/13/86	PTN	SURFACE	YES	PREFORM DEBRIS.	65-75% AMOSITE 1-10% CHRYSTOLITE
DEBRIS 8	11/13/86	PTN	SURFACE	YES	PREFORM DEBRIS.	75-85% AMOSITE
DEBRIS 9	11/13/86	PTN	SURFACE	YES	PREFORM DEBRIS.	45-55% AMOSITE 15-25% CHRYSTOLITE
STEAM 10	11/13/86	PTN	SURFACE	YES	STEAM PIPE INSULATION PIPE BELOW GROUND IN CONCRETE TRENCH FROM POWER STATION(?)	65-75% AMOSITE 5-15% CHRYSTOLITE
PREF 11	11/13/86	PTN	SURFACE	YES	PIPE LAGGING W/ CANVAS COVER VISIBLE.	15-25% AMOSITE 50-60% CHRYSTOLITE

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
G/7 LAG/DEB 12	11/17/86	PTN	SURFACE	YES	WRAP PIPE LAGGING. AT PIER 6/7 ALONG SHORE	65-95% CHALCOTILE
G/7 TRANSITE 12	11/17/86	PTU	SURFACE	YES	TRANSITE PIPE AT PIER 6/7.	25-35% CROCIDOLITE 15-23% CHALCOTILE
LAG/DEB 13	11/17/86	PTU	SURFACE	YES	PREFORM PIPE LAGGING ON SHORELINE. FILL SITE. INSUL. MAY HAVE FLOATED TO SHORE FROM BAY.	TRACE CHALCOTILE
DEBALS 1A	11/17/86	PTN	SURFACE	YES	DEBALS ON PILE. PREFORM PIPE LAGGING.	65-75% AMOSITE 1-10% CHALCOTILE

(6-4)

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
PLAS A	11/21/86	PTN	SURFACE	YES	PLAS-LIKE MATERIAL DEPOSITED ON SURFACE ALONG SHORE OVER ~50' LENGTH.	N.D.
CT B	11/21/86	PTN	SURFACE	YES	1'X1' ACOUSTICAL CEILING TILE. MOST CELLULOSE. SAMPLED GRAY MATERIAL ~12 C.T. OF THIS TYPE	N.D.
TAR PAPER C	11/21/86	PTN	SURFACE	YES	TAR PAPER LEFT BY SHORE, SPREAD OVER ~100 FT ² W/ ASPHALT DEBRIS	N.D.
TRANS. SHING. D	11/21/86	PTN	SURFACE	YES	SHINGLE TYPE MATERIAL. SCATTERED 1"-2" DIAM. PIECES OVER 100 FT ² AREA.	5-15% CHAMISOTILE
DEB 1A	11/21/86	PTN	SURFACE	YES	PREF OR WET PACK DEBRIS ON GRAVEL DRIVEWAY; SPILLAGE ONLY.	20-30% CHAMISOTILE 1-10% AMOSITE
INSUL ADA-5	11/21/86	PTN	SURFACE	YES	COILED INSULATION (?); 1/2" X 1 1/2" X COIL IS ~2 FT. LONG. SILVERY FIBROUS MATERIAL.	60-70% CHAMISOTILE
DEB E	11/21/86	PTN	SURFACE	YES	PIPE LAGGING ON TANK INSULATION; LANDFILL SITE W/ SAND BUT SAND COVERS ~3 SPOTS; 10 FT ² AREA TOTAL	1-10% CHAMISOTILE AMOSITE 75-85% CHAMISOTILE
TRANS/TILE F	11/21/86	PTN	SURFACE	YES	POSS VINYL TILE - TRANSITE TILE ON SHIP FLOORS. ~20 FT ² OF CONTAM. SITE	25-35% CHAMISOTILE
PLAS F	11/21/86	PTN	SURFACE	YES	PLASTER DEBRIS - PIECES 1/4" - 4" DIAM OVER SITE.	TRACE AMOSITE
DEB/FG G	11/21/86	PTN	SURFACE	YES	UNIDENTIFIED DEBRIS W/ GRASS; SHINY LONG FIBERS IN MATERIAL; POSS. FG. OVER 50 FT ² OF SURFACE	85-95% AMOSITE

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

518.10

518.10

518.10

518.10

(9-9)

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
VAT G	11/24/86	PTJ	SURFACE	YES.	POSS VAT, POSS. FROM BLOMGS. FLOOR TILE. OVER 20'X50' AREA.	N.D.
TRANS/TILE G	11/24/86	PTJ	SURFACE	YES.	TRANSITE TILES. POSS. FROM BLOMGS OVER 20'X50' AREA.	15-25% CHAMOTILE
PLAS G	11/24/86	PTJ	SURFACE	YES.	PLASTER MATERIAL ON GROUND. POSS. FROM BLOMGS. OVER 20'X50' AREA.	N.D.
LIG/OES H	11/24/86	PTJ	SURFACE	YES	LAGGING TYPE MATERIAL ON SURFACE, PARTIALLY BURIED. PIPE LAGGING VISIBLE, DEBRIS ON GROUND. 10'X50' VISIBLE	N.D.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
x DEB-I	11/25/86	PTN	SURFACE	YES	DEBRIS - TANK OR PREFORM ON SURFACE & IN WILLOWS.	55-65% AMOITE 1-5% CHANSCITILE
x TRANS PIPE -J	11/26/86	PTN	SURFACE	YES	TRANSITE PIPE. LANDFILL ALONG N. END OF YARD, NE CORNER. OPEN FIELD.	15-25% CHANSCITILE 5-15% CROCIDOLITE
x WPFTG-K	11/26/86	PTN	SURFACE	YES	WET PACKED MATERIAL ON FIBERGLASS PIPE. MATERIAL ON SHORELINE.	70-80% CHANSCITILE
x CLOTH-K	11/26/86	PTN	SURFACE	YES.	CLOTH COVER OVER FIBERGLASS INSULATION. CLOTH COARSE WEAVE. SUSPENDED ON PIPE; PIPE ON SHORELINE.	60-70% CHANSCITILE
x SHTRC-K	11/26/86	PTN	SURFACE	YES.	OLD SHEETROCK DEBRIS MIXED w/ PLASTER. ON SHORELINE.	1-5% CHANSCITILE

BULK SAMPLE LOG FOR ASBESTOS-CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
AF3-1	11/17/86	PTN	SOIL	YES	WHITE CHALKY MATERIAL IN BROWN SOIL. SUSPECT ASBESTOS. SAMPLE FROM FULL LENGTH. (CLAY)	1-10% CHrysotile
AF3-2	11/17/86	PTN	SOIL	YES(?)	WHITE CHALKY MATERIAL FROM IMPACT OF SAMPLER w/ ROCK. SAMPLE FROM FULL LENGTH. (CLAY)	TRACE CHrysotile
AF3-3	11/17/86	PTN	SOIL	NO	FIBROUS PLANT-LIKE MATERIAL, SANDY SOIL.	N.D.
AE3-0	11/17/86	PTN	SOIL	NO	ROCK, CLAY AT TOP NEAR SOIL, SAND BOTTOM. SOME WHITE DEPOSIT FROM ROCK IMPACT.	TRACE CHrysotile
AE3-6 SAND	11/17/86	PTN	SOIL	NO	SAND LAYER UNDER CLAY. POSS. SANDBLASTING SAND - MAY BE FROM CLEANING OPERATION.	N.D.
AE3-7	11/17/86	PTN	SOIL	NO	SOIL CLAY & ROCK SAMPLE FROM ~1' to 5' DEPTH. NO OBVIOUS SUSPECT MATERIAL. LOCATION IMMEDIATELY W OF BUILDING FOUNDATION	TRACE CHrysotile
AE3-6	11/17/86	PTN	SOIL	NO	GRAVEL, CLAY, NO SUSPECT. H ST, IN PAVEMENT.	N.D.
AE3-5	11/17/86	PTN	SOIL	NO	GRAVEL, COARSE SAND, SAND, CLAY. E OF BUILDING SOFT	1-10% CHrysotile
AE3-2	11/17/86	PTN	SOIL	NO	CLAY, GRAVEL. LIGHTER GRAY MATERIAL - BUT PROBABLY NON-ASBESTOS. W OF BUILDING SOFT.	N.D.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
503 - VAT-2	11/18/86	PTN	SURFACE	YES	FLOOR TILE ON CONCRETE SLAB. POSS. VAT.	1-5% CHRYSTILE
503 - ROOF PAPER-2	11/18/86	PTN	SURFACE	YES	TAR PAPER, PROBABLY FROM ROOF.	1-5% CHRYSTILE 1-5% AMOSITE
AE3-3	11/18/86	PTN	SOIL	NO	gravel, sandy silt, poss. Fill, brownish Serpentine ^{rock} present "H" STREET.	TRACE CHRYSTILE
AF4-1	11/18/86	PTN	SOIL	NO	GRAVEL, SERPENTINE ROCK, SANDY SOIL NO SUSPECT ACM. PAVEMENT IN "I" STREET.	N.D.
AE3-4	11/18/86	PTN	SOIL	NO	GRAVEL, SAND, ROCK... PARKING LOT-PAVED.	N.D.
AE3-1	11/18/86	PTN	SOIL	NO	SANDY SOIL, SILT, ROCK. BY BLOND SOO IN GRASS FIELD	N.D.
AE4-11	11/18/86	PTN	SOIL	NO.	SANDY LOAM, CLAY, TIGHT SILT, GRAVEL IN SOME LAYERS. S END BLOND SOO, BY "I" ST.	1-5% CHRYSTILE
AE4-10	11/18/86	PTN	SOIL	NO.	BAY MUD AT BOTTOM - TIGHT CLAY, SANDY SOIL W/ GRAVEL NEAR TOP. BY GAS STATION; IN STREET.	1-5% CHRYSTILE
AE4-9	11/18/86	PTN	SOIL	NO	SERPENTINE ROCK, COARSE SAND, GRAVEL AT TOP; CLAY AT BOTTOM PAVED AREA.	1-10% CHRYSTILE
AE4-4	11/18/86	PTN	SOIL	NO	GRAVEL, SERPENTINE, COARSE SAND AT TOP; CLAY - TIGHT SILT AT BOTTOM. ROAD IN YARD.	TRACE CHRYSTILE

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
ADA-21	11/19/86	PTN	SOIL	NO	COARSE SAND w/ SILT, GRAVEL; CLAY GRAVEL; SERPENTINE ROCK @ BOTTOM FILL SITE W. OF "I" ST.	N.D.
ADA-20	11/19/86	PTN	SOIL	NO	SAND + SILT; SAND + GRAVEL; SERPENTINE ROCK. GRAVEL PARKING LOT.	TRACE CHRYOTILE
ADA-22	11/19/86	PTN	SOIL	NO.	SAND + GRAVEL; SILT + GRAVEL; GRAVEL; CLAY. W OF "I" ST, E OF 704 (BLONG)	1-5% CHRYOTILE
AEA-5	11/19/86	PTN	SOIL	NO.	SILT, SAND, GRAVEL - PACKED; CLAY + SILT; SHELL; CLAY. PAVED STORAGE PARKING LOT.	1-5% CHRYOTILE
AEA-6	11/19/86	PTN	SOIL	NO.	SILT + GRAVEL; SOME SERPENTINE; GRAVEL + SAND; GRAVEL, SAND, SERPENTINE ROCK. PAVED PARKING LOT.	1-10% CHRYOTILE
AEA-7	11/19/86	PTN	SOIL	NO.	COARSE SAND + GRAVEL; TIGHT SILTY SAND; ROCK; CLAY + ROCK + SHELL. PAVED PARKING LOT.	1-5% CHRYOTILE
AEA-6	11/19/86	PTN	SOIL	NO	COMPACTED GRAVEL + SILT - CRUMBLES; FINE SAND + GRAVEL - GRAY; ROCK. DIRT COVERED STORAGE YARD. POSS. ROCK	TRACE CHRYOTILE
AEA-3	11/19/86	PTN	SOIL	NO	COMPACTED FINE SILT w/ SERPENTINE; SAND + FINE GRAVEL; GRAVEL + CLAY; PAVED PARKING AREA ON "R" ST.	TRACE CHRYOTILE
AEA-2	11/19/86	PTN	SOIL	NO	GRAVELLY CLAY w/ SERPENTINE ROCK; GRAVELLY SAND, ROCK; DRIVE TO STORAGE YARD.	1-5% CHRYOTILE
AEA-2-SAND	11/19/86	PTN	SOIL	NO	SAND AT ~4 1/2' DEPTH. POSS. FILL. SANDBLAST SAND MAY BE SOURCE.	N.D.

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BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
AE4-1	11/20/86	DKJ	Soil	No	Asphalt surface, Gravelly Clay, Fill Serpentine in last 12 inches	1-5% CHAMSYTILE
AD4-16	11/20/86	DKJ	Soil	NO	Gravel Surface, Gravelly Clay Fill Serpentine Present	N.D.
AD4-15	11/20/86	DKJ	Soil	NO	Asphalt surface, Clay w/Gravel Fill Serpentine Present.	N.D.
AD4-10	11/20/86	DKJ	Soil	No	Gravel Surface, Gravelly Clay Fill, Serpentine present	Trace CHAMSYTILE
AD4-11	11/20/86	DKJ	Soil	No	Gravel Surface, Gravelly Sand w Clay Serpentine present	1-10% CHAMSYTILE
Boilerkicking AD4-11	11/20/86	DKJ	Surface	Yes	Lagging between Fire brick and shell of abandoned small boiler near AD4-11 hole.	60-70% CHAMSYTILE
AD4-17	11/20/86	DKJ	Soil	NO	Gravel Surface, Gravelly Fill, last ft. - Bay Mud Fill. Serpentine Present	N.D.
AD4-18	11/20/86	DKJ	Soil	NO	Asphalt Rd Surface, Gravel & Clay fill Serpentine.	N.D.
AD4-13	11/20/86	DKJ	Soil	NO	Gravel Surface, Oil Stain on gravel (Spill) Gravel & Sand Fill,	1-10% CHAMSYTILE
AD4-14	11/20/86	DKJ	Soil	NO	Asphalt Surface, Gravelly clay Fill	Trace CHAMSYTILE

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
AD4-19	11/20/86	DKJ	Soil	No	Gravel Surface, Gravelly clay & Sand / Serpentine	NO.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
ADA-24	11/21/86	PTN	SOIL	NO	GRAVELLY CLAY, CLAY + ROCK, GRAVEL, GRAVELLY CLAY. SOME SERPENTINE PAVED PARKING AREA ALONG SPEAR; 702.	TRACE CHrysOTILE
ADA-8	11/21/86	PTN	SOIL	NO	GRAVELLY SAND, SANDY CLAY, SANDY GRAVEL + SERPENTINE; SOME ROCK. PAVED ROAD - SPEAR.	TRACE CHrysOTILE
ADA-9	11/21/86	PTN	SOIL	NO.	SANDY CLAY; GRAVEL - FINE ROCK + SANDY CLAY; CLAY + FINE ROCK; FIBROUS ROCK. PAVED ROAD - SPEAR.	10-20% CHrysOTILE.
ADA-23	11/21/86	PTN	SOIL	NO.	GRAVEL; GRAVELLY CLAY W/ SERPENTINE; COARSE SAND; GRAVEL. GRAVEL DRIVE THRU GRAVEL STORAGE YRD.	TRACE CHrysOTILE
ADA-12	11/21/86	PTN	SOIL	NO.	GRAVELLY CLAY W/ SERPENTINE; TIGHT SILT/CLAY W/ SERPENTINE; GRAVEL STONE AREA BESIDE "R" STREET.	TRACE CHrysOTILE
ADA-7	11/21/86	PTN	SOIL	NO	TIGHT GRAVEL CONTAINING SILT; SERPENTINE ROCK IN CLAY; FINE SAND + SERPENTINE; GRAVEL; CLAY. PAVED ROAD - SPEAR ST.	TRACE CHrysOTILE
ADA-C	11/21/86	PTN	SOIL	NO.	GRAVELLY SAND; SILTY GRAVEL + SERPENTINE; SILTY SAND + SERPENTINE. PAVED ROAD - SPEAR ST.	N.D.
ADA-5	11/21/86	PTN	SOIL	NO	GRAVELLY SAND; SILTY + SERPENTINE; SILTY GRAVEL; FINE FRAGMENTED ROCK. EX OUT FIELD.	TRACE CHrysOTILE 1-5% CHrysOTILE
FIBROUS ADA-5	11/21/86	PTN	SOIL	YES	INSULATION - FIBROUS TYPE AS SURFACE SAMPLE AT 4' DEPTH.	50-60% CHrysOTILE
ADA-1	11/21/86	PTN	SOIL		GRAVELLY SAND; GRAVEL; CLAY-SILT. GRAVEL; SERPENTINE FINE ROCK FILL FIELD. - FILL SOIL.	TRACE CHrysOTILE

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BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
ADA-2	11/21/86	PTN	SOIL	YES (NATURAL)	GRAVELLY SAND; SAND; SILTY SAND - TIGHT w/ SERPENTINE. CRYSTALS AT 4' DEPTH - POSS CHAMISOTILE.	TRACE CHAMISOTILE
5/11/86 ADA-2C	11/21/86	PTN	SOIL	NO	FINE SAND, COARSE SAND, SAND, SILT. POSS. PENETRATED w/ OIL. FILL AREA w/ OF "J" ST.	N.D.
5/11/86 ADA-2T	11/21/86	PTN	SOIL	NO	SANDY GRAVEL; SILT; GRAVEL; SILTY SAND w/ SERPENTINE. FILL AREA w/ OF "J" ST.	1-5% CHAMISOTILE
5/11/86 AE4-12	11/21/86	PTN	SOIL	NO	SAND + FRAC ROCK; SANDY + SOME GRAVEL - WRE; SANDY GRAVEL. FILL AREA w/ OF "J" ST BY BB FIELD.	1-10% CHAMISOTILE TRACE AMOSITE
(6-14) AE3-9	11/21/86	PTN	SOIL	NO	SILTY SAND, SAND, CLAY; GRAVEL; SILTY CLAY; GRAVELLY SAND. 100' W OF HUSSEY BY OLD TRANSFORMER	N.D.
AC4-1	11/21/86	PTN	SOIL	NO.	GRAVELLY SAND; SILT SAND + SERPENTINE; SILT + GRAVEL. SCRAP YARD; ASPHALT SURFACE.	TRACE CHAMISOTILE 1-5% CHAMISOTILE
5/11/86 CLCTH 20	11/21/86	PTN	SURFACE SOIL	YES	POSS. ASBESTOS CLOTH. SCRAP YARD; ASPHALT SURFACE	5-15% CHAMISOTILE
5/11/86 OEB 20	11/21/86	PTN	SURFACE SOIL	YES	DEBRIS; PROBABLY PIPE LIGGING. REP OF MATERIAL OVER ENTIRE YARD. 1" DIA. SCRAP YARD; ASPHALT SURFACE	40-50% AMOSITE 10-20% CHAMISOTILE
5/11/86 LAG/DES 21	11/21/86	PTN	SURFACE	YES	PIPE LIGGING ON ASPHALT SURFACE. TYPICAL OF DEBRIS OVER SCRAP YARD SURFACE. SIM TO OEB-20.	70-80% CHAMISOTILE
LAG 22	11/21/86	PTN	SURFACE	YES	INCIDENT PIPE LEFT IN YARD. NOT MAIN YD. PIPE LIGGING. ASPHALT SURFACE	65-75% AMOSITE 1-10% CHAMISOTILE

NOTE: SCRAP YARD AS NOTED ON DRAWING IS CONTAM. w/ PIPE LIGGING DEBRIS RANDOMLY DISTRIBUTED ALONG FENCES.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
ADA-25	11/24/86	PTJ	SOIL	YES NATURAL	GRAVELLY SILT, SILT W/ SERPENTINE; SAND + FRACTURED ROCK, WHITE FINE-GR. ROCK SILT + FINE SERPENTINE; YARD W/ ASPHALT SURFACE.	TRACE CHrysotile
ADA-4	11/27/86	PTJ	SOIL	NO	GRAVELLY SAND, SAND + SILT + SERPENTINE; SAND + SILT; YARD + ASPHALT SURFACE	1-5% CHrysotile
ADA-3	11/24/86	PTJ	SOIL	NO	GRAVELLY SAND, SILTY + SERPENTINE FRAGMENTS, SILT + SERPENTINE YARD + ASPHALT SURFACE	1-5% CHrysotile
BD4-1	11/24/86	PTJ	SOIL	NO	GRAVELLY SAND, SILT + SOFT SERPENTINE = FRACTURES EASILY; ASPHALT LOT.	1-5% CHrysotile

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BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BD4-2	11/25/86	PTN	SOIL	NO	GRAVELLY SAND; SILTY SAND; SILTY SAND + SERPENTINE. GRAVEL ASPHALT COVERED YARD.	1-5% CHRYSTILE
BC4-2	11/25/86	PTN	SOIL	NO	GRAVELLY SAND; GRAVEL + SANDY SILT; GRAVELLY CLAY; SAND. GRAVEL COVERED YARD.	N.D.
BC4-1	11/25/86	PTN	SOIL	NO.	GRAVELLY SAND; GRAVELLY CLAY; GRAVELLY SAND; CLAY; FRACTURED ROCK ASPHALT-YARD. COVERED w/ ASPHALT	N.D.
BE3-1	11/25/86	PTN	SOIL	NO	ASPHALT DRIVE BETWEEN BLDG. 406 & 413. SANDY SILT + FRAC. ROCK; CLAY + ROCK + SHELL; SANDY SILT.	TRACE CHRYSTILE
BES-2	11/25/86	PTN	SOIL	NO	GRAVELLY SAND; CLAY + FRAC ROCK; CLAY; GRAVELLY CLAY + ROCK. HUSSEY ST. BY BLDG. 439; ASPHALT SURFACE	N.D.
BE3-3	11/25/86	PTN	SOIL	NO	SILTY SAND + FRAC ROCK; GRAVEL + SAND; GRAVELLY SAND. COCHRANE + MAJSEAU ST.;	N.D.
BE3-5	11/25/86	PTN	SOIL	NO.	SILTY SAND + FRAC ROCK; GRAVELLY SAND; SANDY GRAVEL. SANDY, PROPELLER STORAGE YARD.	N.D.
BC3-1	11/25/86	PTN	SOIL	NO.	SILTY SAND + SERPENTINE; SAND + SERP.; GRAVELLY SAND. GRAVEL STORAGE YARD.	1-5% CHRYSTILE
NAT ROCK FORM	11/25/86	PTN	SURFACE	NO.	NATURAL ROCK FORMATION; ROCK OUTCROPPING ON HILLSIDE ABOVE BLDG 813.	

BULK SAMPLE LOG FOR ASBESTOS-CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BF3-5	11/26/86	PTN	SOIL	NO	SANDY GRAVEL; SAND; SAND + FINE GRAVEL SHELL FRAGMENTS. ABANDONED PAVED PARKING LOT.	N.D.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BC3-2	11/26/86	PTN	SOIL	NO	GRAVELLY SAND; SANDY SILT w/ SERPENTINE; SAND; PARKING LOT W OF BLDG 813.	TRACE CHrysotile
BC3-4	11/26/86	PTN	SOIL	NO	GRAVELLY CLAY; SILTY GRAVEL; ROCK. ASPHALT PARKING AREA OUTSIDE FENCE; BY 813.	TRACE CHrysotile
BE3-4	11/26/86	PTN	SOIL	NO.	SILTY TOPSOIL + ROOTS; GRAVELLY CLAY; CLAY + SANDSTONE; CLAY + SERPENTINE ASPHALT PARKING LOT.	1-5% CHrysotile
BF3-2	11/26/86	PTN	SOIL	NO.	SILTY + SERPENTINE FRACTURES; SANDY GRAVEL; SILT + SERPENTINE; GRAVEL. FIELD BY BLDG FOUNDATION.	TRACE CHrysotile
BF3-2 LAYERED	11/26/86	PTN	SOIL.	NO	ROCK IN TOP 2' OF BORING. FRACTURES IN THIN <1/16" LAYERS; POSS. FRACTURING TO PRODUCE FIBROUS MATERIAL	N.D.
BF3-1	11/26/86	PTN	SOIL	YES NATURAL	CLAY + GRAVEL + SUSPECT ACM AT 2' DEPTH; GRAVEL + SAND; SANDY GRAVEL OPEN FIELD NEAR STEAM PLANT.	1-5% CHrysotile
BF3-3	11/26/86	PTN	SOIL	NO	SAND; SILT + GRAVEL; SANDY GRAVEL; FRAC ROCK + SILT. ROAD - ROCK DRIVE E OF STEAM PLANT.	N.D.
BF3-4	11/26/86	PTN	SOIL	NO	ABANDONED ASPHALT DRIVE. COMPRESSED LAYERED SAND; GRAVELLY SANDY FRAC. ROCK;	N.D.
BF3-7	11/26/86	PTN	SOIL	YES NATURAL	SILTY + GRAVEL + SUSPECT WH. MATERIAL; SAND + FRAC ROCK; SAND + GRAVELY CLAY GRAVEL DRIVE BY BLDG 325.	TRACE CHrysotile
BF3-8	11/26/86	PTN	SOIL		SANDY + GRAVEL; SAND + FINE GRAVEL; BEACH SAND + SHELLS. GRAVEL YARD AT HUSSEY & MAHAN.	N.D.

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BF3-6	12/1/86	PTN	SOIL	NO	GRAVEL SANDY SILT; GRAVELLY SAND GRAVEL DRIVE	1-5 CHL-SOIL
BF3-10	12/1/86	PTN	SOIL	NO	GRAVELLY SAND; SAND; GRAVELLY SAND; SAND; BEACH SAND - SHAL FRAGMENTS GRAVEL DRIVE.	N.D.
BG3-1	12/1/86	PTN	SOIL	NO	SAND; BEACH SAND; BEACH SAND - SHAL DEBOLES. GRAVEL DRIVE	N.D.
BF2-1	12/1/86	PTN	SOIL	NO	GRAVELLY SILTY CLAY; SANDY SILT + SERPENTINE; SAND PAVED CRANE TRACK TO BEATH 20.	N.D.
BF3-9	12/1/86	PTN	SOIL	NO	GRAVEL + SERPENTINE ROCK FRAGMENTS + CLAY; FRAGMENTED ROCK, SAND. GRAVEL STORAGE YARD	N.D.
BF2-2	12/1/86	PTN	SOIL	NO	SILTY CLAY + FRAG. ROCK; SANDY SILT + GRAVEL; SILTY CLAY + GRAVEL; SANDY GRAVEL. ASPHALT DRIVE AND PARKING LOT.	ND
BE2-1	12/1/86	PTN	SOIL	NO	SILTY GRAVEL + ROCK; GRAVELLY SILT; SILTY GRAVEL - SERPENTINE. ASPHALT DRIVE AND PARKING LOT.	ND
BE3-6	12/1/86	PTN	SOIL	NO.	SAND FINE GRAVEL; SAND + GRAVEL; SILTY CLAY + SERPENTINE FRAG. ROCK. ASPHALT DRIVE AND PARKING LOT.	ND
BB2-5	12/1/86	PTN	SOIL	NO	CLAY; ROCK; SILT CLAY + GRAVEL; CLAY + ROCK; PAVED DRIVE & PARKING LOT.	ND
BB2-4	12/1/86	PTN	SOIL	NO	SANDY GRAVEL; SILTY FRAGMENTED ROCK; CLAY + ROCK; GRAVELLY SAND; CLAY. GRAVEL STORAGE AREA ON PERIMETER.	1-10 CHL-SOIL

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BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BB2-1	12/1/86	PTN	SOIL	YES (NATURAL)	CLAY; SILTY GRAVEL; CLAY + GRAVEL; CLAY + SERPENTINE; WHITE VEINS. PAVED DRIVE BETWEEN BUILDING 121-122.	1-10 CHL + SGTIC

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BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

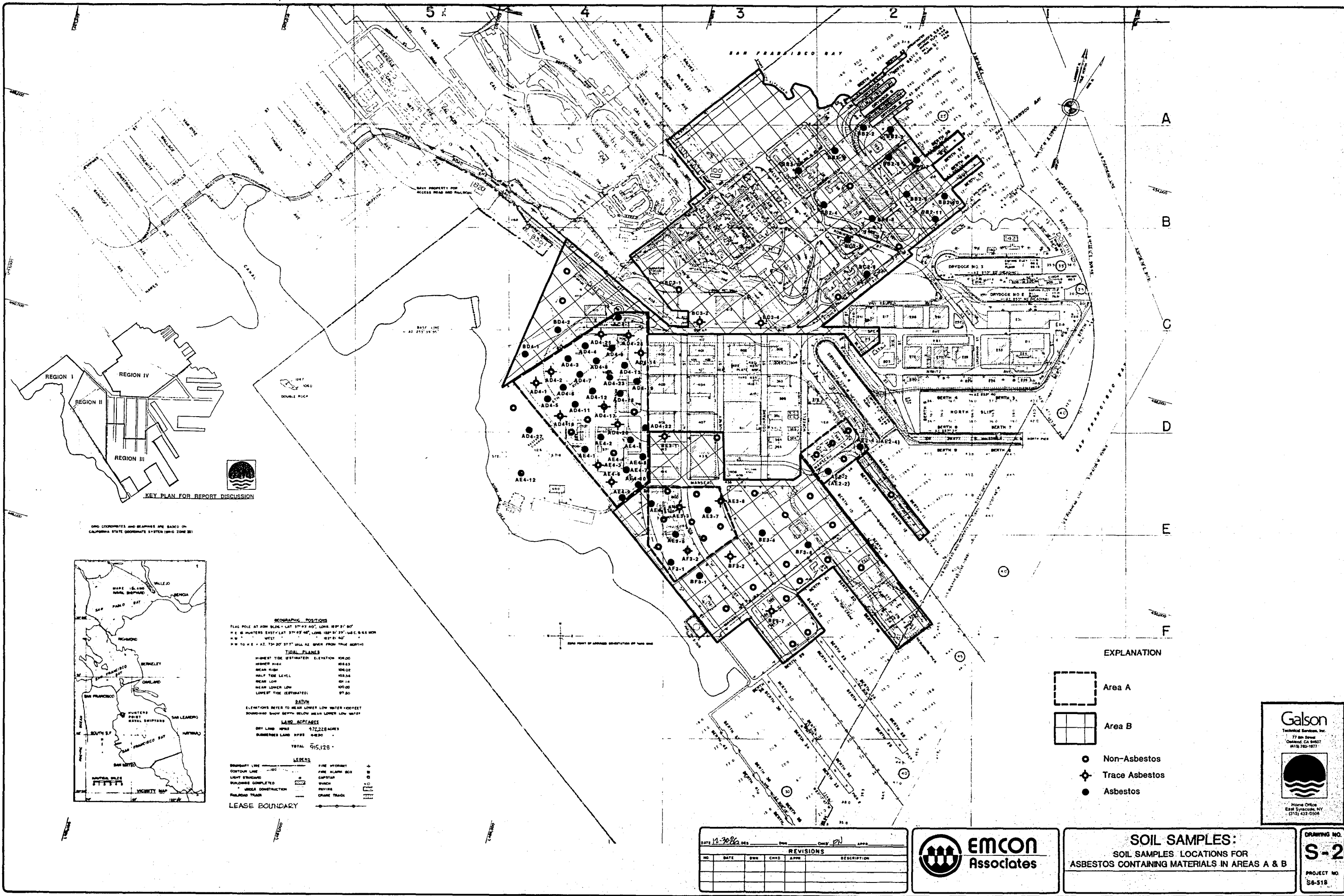
Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BB2-2	12/2/86	PTN	SOIL	NO	SILTY CLAY + GRAVEL; GRANULY SAND; ROCK + SAND. ASPHALT COVERED YARD. NEAR SHORE	1-10 CHRYSOPILE
BB2-3	12/2/86	PTN	SOIL	NO	SAND; SANDY GRAVEL; SILTY GRAVEL; SAND; CLAY + GRAVEL. FILL ASPHALT COVERED YARD. NEAR SHORE	1-5 CHRYSOPILE
BB2-7	12/2/86	PTN	SOIL	NO.	SAND + ASPHALT + ROCK FILL; CLAY + GRAVEL; CLAY + GRAVEL FILL ASPHALT COVERED YARD. NEAR SHORE	1-10 CHRYSOPILE
BB2-9	12/2/86	PTN	SOIL	NO.	SAND + FINE ROCK; CLAY + SERPENTINE; FINE ROCK; GRANULY SILT; GRANULY CLAY. ASPHALT COVERED YARD	1-5 CHRYSOPILE
BB2-10	12/2/86	PTN	SOIL	NO.	COARSE SAND; CLAY + GRAVEL; SILTY CLAY + GRAVEL; SANDY CLAY + ROCK; CLAY + ROCK. ASPHALT COVERED YARD BY SHORE	1-10 CHRYSOPILE
BB2-11	12/2/86	PTN	SOIL	NO	GRAVELLY SAND; CLAY + GRAVEL; FINE ROCK FRAGMENTS; GLAY; ODDS OF ORGANICS. ASPHALT COVERED YARD	1-5 CHRYSOPILE
BB2-8	12/2/86	PTN	SOIL	NO	SAND; SANDY CLAY + FRAGMENTED ROCK; GRAVELLY SAND; CLAY + ROCK FRAGMENTS. ASPHALT COVERED YARD	1-10 CHRYSOPILE
BB2-6	12/2/86	PTN	SOIL	NO	GRAVELLY SAND; GRAVEL + CLAY; ROCK; SILT + SERPENTINE; SANDY SILT. ASPHALT COVERED YARD	1-5 CHRYSOPILE
BB3-1	12/2/86	PTN	SOIL	NO	CLAY; SANDY SILT + SERPENTINE; GRAVELLY COARSE SAND; SERPENTINE AT BOTTOM SANDY YARD OUTSIDE BLDG 116.	5-15 CHRYSOPILE
BB2-1	12/2/86	PTN	SOIL	NO.	SILTY LOAM; SERPENTINE ROCK; ROCK GRASSY LAWN OUTSIDE BLDG 110.	1-5 CHRYSOPILE

BULK SAMPLE LOG FOR ASBESTOS CONTAINING MATERIALS

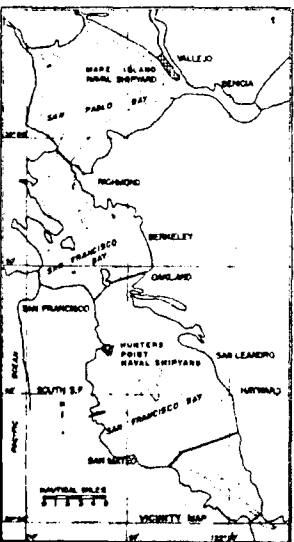
CLIENT: EMCON Associates
 FACILITY NAME: Department of the Navy
 FACILITY LOCATION: Hunters Point Naval Shipyard

PROJECT NO: S6-518
 SURVEY BY: Phil Numoto
 Daryl Jahn

Sample Number	Date Collected	Sampled By	Sample Type (Surface/Soil)	Suspect ACM Visible (Yes/No)	Description / Comments	Asbestos Content
BC2-3	12/3/86	PTJ	SOIL	YES (NATURAL)	Serpentine containing silt-clay; white bands in serpentine; gravel; serpentine. ASPHALT PARKING LOT BY BLDG 101	1-10 CHANGES
BC2-2	12/3/86	PTJ	SOIL	NO	SILTY SAND + GRAVEL; CLAY; SILTY SERPENTINE; SILTY SERPENTINE MATERIAL. ASPHALT PARKING LOT BY BLDG 101	ND
BC2-1	12/3/86	PTJ	SOIL	NO	CLAY; ROCK + CLAY; SERPENTINE + SILT; ROCK. ASPHALT PARKING LOT BY BLDG 13-7	ND
BE2-2	12/3/86	PTJ	SOIL	NO	SANDY GRAVEL - FILL MATERIAL; GRAVELLY SAND MIDDLE OF SOUTH PIER; ASPHALT COVER	ND
AE3-10	12/3/86	PTJ	SOIL	NO	SILT; SILT + GRAVEL; GRAVELLY SILT. SOME SERPENTINE IN FILL. ASPHALT DRIVE	ND
AE2-2	12/3/86	PTJ	SOIL	NO	GRAVELLY SANDY SILT; SANDY GRAVEL; ROCK; ASPHALT PARKING LOT ON SHORE.	1-5% CHANGES
AE2-3	12/3/86	PTJ	SOIL	NO	SANDY GRAVEL; GRAVELLY SAND; SAND + SHELL + ROCK FRAGMENTS. ASPHALT PARKING LOT ON SHORE.	N.D.
AE2-4	12/3/86	PTJ	SOIL	NO	FINE GRAVEL + SAND; FINE SAND + GRAVEL; SILTY SERPENTINE + ROCK FRAGMENTS; SAND + GRAVEL ASPHALT YARD ON SHORE	13-25% ACTINOLITE
AD2-1	12/3/86	PTJ	SOIL	NO	FINE GRAVEL IN SAND; LIGHT FILL SAND; ROCK; WIRE; SAND; ROCK AT BOTTOM. GRAVEL AL TRAIL BED RESIDE BLDG 306.	N.D.
AE2-1	12/3/86	PTJ	SOIL	NO	GRAVELLY SAND; GRAVELLY, SILTY CLAY; GRAVELLY SAND + ROCK. PAVED DRIVE BETWEEN BLDGS 306 & 307.	N.D.



GRID COORDINATES AND BEARINGS ARE BASED ON CALIFORNIA STATE COORDINATE SYSTEM (NAD 83 ZONE 10)



GEOGRAPHIC POSITIONS
FLAG POLE AT 400' BLM - LAT 37° 43' 40", LONG 122° 27' 50"
H.E. HUNTERS EAST - LAT 37° 43' 40", LONG 122° 27' 50" W.C. 6.65 MCH
H.W. - WEST - 122° 27' 50"
H.W. TO H.E. - AZ 75° 20' 37" (ALL AZ GIVEN FROM TRUE NORTH)

TIDAL PLACES
HIGHEST TIDE ESTIMATED ELEVATION 100.00
HIGHER HIGH 100.00
MEAN HIGH 100.00
HALF TIDE LEVEL 100.00
MEAN LOW 100.00
LOWER LOW 100.00
LOWEST TIDE ESTIMATED 97.80

BATHY
ELEVATIONS REFER TO MEAN LOWER LOW WATER (VDDT)
SOUNDINGS SHOW DEPTH BELOW MEAN LOWER LOW WATER

LAND ACRES
DRY LAND 49.83
SUBMERGED LAND 49.83
TOTAL 99.66

LEGEND
BOUNDARY LINE
CONTOUR LINE
LIGHT STANDARD
BUILDING COMPLETED
UNDER CONSTRUCTION
RAILROAD TRACK
LEASE BOUNDARY
FINE HYDRAULIC
FINE ALUMINUM
CAPSTAR
QUICK
PIPELINE
GRADE TRACK

EXPLANATION

Area A

Area B

Non-Asbestos

Trace Asbestos

Asbestos

DATE 11-20-82	DES	OWN	CHKD	APPD
NO	DATE	BY	CHKD	APPD
1	11-20-82	DES	OWN	CHKD
2	11-20-82	DES	OWN	CHKD
3	11-20-82	DES	OWN	CHKD
4	11-20-82	DES	OWN	CHKD
5	11-20-82	DES	OWN	CHKD
6	11-20-82	DES	OWN	CHKD
7	11-20-82	DES	OWN	CHKD
8	11-20-82	DES	OWN	CHKD
9	11-20-82	DES	OWN	CHKD
10	11-20-82	DES	OWN	CHKD



SOIL SAMPLES:
SOIL SAMPLES LOCATIONS FOR
ASBESTOS CONTAINING MATERIALS IN AREAS A & B

DRAWING NO.
S-2

PROJECT NO.
S6-518

Galson
Technical Services, Inc.
77 8th Street
Oakland, CA 94607
(415) 763-1877

Appendix E
CERTIFIED ANALYTICAL REPORTS

ANAMETRIX
GC/MS SPECIALISTS
ENVIRONMENTAL • ANALYTICAL SERVICES
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON
DEC 10 1986

December 1, 1986
Work Order Number 8611020
Date Received 11/20/86
PO No. 12132

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Ten soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED	
8611020-01	365-02.04	AE3-4 2-2.5	8240	11/18/86	11/26/86
-02	"	AE3-5 2.5-3	"	11/17/86	11/24/86
-03	"	AE4-11 2.5-3	"	11/18/86	"
-04	"	AF3-1 2.5-3	"	11/17/86	"
-05	"	COMP AE3-2	8270	"	"
-06	"	COMP AE3-5	"	"	11/21/86
-07	"	COMP AE3-6	"	"	11/24/86
-08	"	COMP AE3-7	"	"	11/21/86
-09	"	COMP AE3-8	"	"	"
-10	"	COMP AF3-1	"	"	"

RESULTS

See enclosed data sheets, Forms 1-1 thru 2-10b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-1 thru 3-2.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

ANAMETRIX
GC/MS SPECIALISTS
ENVIRONMENTAL • ANALYTICAL SERVICES
2754 AJELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

December 1, 1986
Work Order Number 8611020
Date Received 11/20/86
PO No. 12132

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Ten soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED	
8611020-11	365-02.04	COMP AF3-2	8270	11/17/86	11/21/86
-12	"	COMP AF3-3	"	"	"
-13	"	COMP AE3-1	"	11/18/86	11/24/86
-14	"	COMP AE3-3	"	"	"
-15	"	COMP AE3-4	"	"	"
-16	"	COMP AE4-4	"	"	"
-17	"	COMP AE4-9	"	"	"
-18	"	COMP AE4-10	"	"	"
-19	"	COMP AE4-11	"	"	"
-20	"	COMP AF4-1	"	"	"

RESULTS

See enclosed data sheets, Forms 2-11a thru 2-20b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-3 thru 3-9.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

Burt Sutherland

Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE3-4 2-2.5
Lab ID # : 8611020-01
Matrix : SOIL
Released : 12/01/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	20	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE3-5 2.5-3
Lab ID # : 8611020-02
Matrix : SOIL
Released : 12/01/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	3	+
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE4-11 2.5-3
Lab ID # : 8611020-03
Matrix : SOIL
Released : 12/01/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AF3-1 2.5-3
Lab ID # : 8611020-04
Matrix : SOIL
Released : 12/01/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	7	+
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE3-2
Lab ID # :8611020-05
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/20/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-2
Lab ID # : 8611020-05
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	170	+
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	530	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE3-5
Lab ID # :8611020-06
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/20/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-5
Lab ID # : 8611020-06
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg
83-32-9	* Acenaphthene	<66 U
51-28-5	* 2,4-Dinitrophenol	<320 U
100-02-7	* 4-Nitrophenol	<320 U
132-64-9	**Dibenzofuran	<66 U
121-14-2	* 2,4-Dinitrotoluene	<66 U
606-20-2	* 2,6-Dinitrotoluene	<66 U
84-66-2	* Diethylphthalate	<66 U
7005-72-3	* 4-Chlorophenyl-phenylether	<66 U
86-73-7	* Fluorene	<66 U
100-01-6	**4-Nitroaniline	<320 U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320 U
86-30-6	* N-Nitrosodiphenylamine	<66 U
122-66-7	**1,2-Diphenylhydrazine	<66 U
101-55-3	* 4-Bromophenyl-phenylether	<66 U
118-74-1	* Hexachlorobenzene	<66 U
87-86-5	* Pentachlorophenol	<320 U
85-01-8	* Phenanthrene	<66 U
120-12-7	* Anthracene	<66 U
84-74-2	* Di-n-Butylphthalate	<66 U
206-44-0	* Fluoranthene	<66 U
92-87-5	* Benzidine	<320 U
129-00-0	* Pyrene	<66 U
85-68-7	* Butylbenzylphthalate	<66 U
91-94-1	* 3,3'-Dichlorobenzidine	<132 U
56-55-3	* Benzo(a)Anthracene	<66 U
117-81-7	* bis(2-Ethylhexyl)Phthalate	600 +
218-01-9	* Chrysene	<66 U
117-84-0	* Di-n-Octyl Phthalate	<66 U
205-99-2	* Benzo(b)Fluoranthene	<66 U
207-08-9	* Benzo(k)Fluoranthene	<66 U
50-32-8	* Benzo(a)Pyrene	<66 U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66 U
53-70-3	* Dibenz(a,h)Anthracene	<66 U
191-24-2	* Benzo(g,h,i)Perylene	<66 U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-6
Lab ID # : 8611020-07
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-6
Lab ID # : 8611020-07
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	260	+
206-44-0	* Fluoranthene	190	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	180	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	230	+
218-01-9	* Chrysene	81	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	120	+
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-7
Lab ID # : 8611020-08
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-7
Lab ID # : 8611020-08
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	600	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-8
Lab ID # : 8611020-09
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-8
Lab ID # : 8611020-09
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1700	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AF3-1
Lab ID # : 8611020-10
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AF3-1
Lab ID # : 8611020-10
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg
83-32-9	* Acenaphthene	<66 U
51-28-5	* 2,4-Dinitrophenol	<320 U
100-02-7	* 4-Nitrophenol	<320 U
132-64-9	**Dibenzofuran	<66 U
121-14-2	* 2,4-Dinitrotoluene	<66 U
606-20-2	* 2,6-Dinitrotoluene	<66 U
84-66-2	* Diethylphthalate	<66 U
7005-72-3	* 4-Chlorophenyl-phenylether	<66 U
86-73-7	* Fluorene	<66 U
100-01-6	**4-Nitroaniline	<320 U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320 U
86-30-6	* N-Nitrosodiphenylamine	<66 U
122-66-7	**1,2-Diphenylhydrazine	<66 U
101-55-3	* 4-Bromophenyl-phenylether	<66 U
118-74-1	* Hexachlorobenzene	<66 U
87-86-5	* Pentachlorophenol	<320 U
85-01-8	* Phenanthrene	<66 U
120-12-7	* Anthracene	<66 U
84-74-2	* Di-n-Butylphthalate	<66 U
206-44-0	* Fluoranthene	<66 U
92-87-5	* Benzidine	<320 U
129-00-0	* Pyrene	<66 U
85-68-7	* Butylbenzylphthalate	<66 U
91-94-1	* 3,3'-Dichlorobenzidine	<132 U
56-55-3	* Benzo(a)Anthracene	<66 U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1500 +
218-01-9	* Chrysene	<66 U
117-84-0	* Di-n-Octyl Phthalate	<66 U
205-99-2	* Benzo(b)Fluoranthene	<66 U
207-08-9	* Benzo(k)Fluoranthene	<66 U
50-32-8	* Benzo(a)Pyrene	<66 U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66 U
53-70-3	* Dibenz(a,h)Anthracene	<66 U
191-24-2	* Benzo(g,h,i)Perylene	<66 U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AF3-2
Lab ID # :8611020-11
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/20/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AF3-2
Lab ID # : 8611020-11
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2700	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	200	+
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AF3-3
Lab ID # : 8611020-12
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	93	+
106-46-7	* 1,4-Dichlorobenzene	88	+
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AF3-3
Lab ID # : 8611020-12
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	95	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2400	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	100	+
207-08-9	* Benzo(k)Fluoranthene	91	+
50-32-8	* Benzo(a)Pyrene	74	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	66	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-1
Lab ID # : 8611020-13
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-1
Lab ID # : 8611020-13
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1200	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-3
Lab ID # : 8611020-14
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-3
Lab ID # : 8611020-14
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1300	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-4
Lab ID # : 8611020-15
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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U : Indicates instrument detection limit.

ANAMETRIX
GC/MS SPECIALISTS
ENVIRONMENTAL • ANALYTICAL SERVICES
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON
DEC 10 1986

December 9, 1986
Work Order Number 8611027
Date Received 11/26/86
PO No. 12150

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Fourteen soil samples were received for analysis of volatiles by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED
8611027-01	365-02.04 AD4-1 2-2.5	8240	11/21/86	12/08/86
-02	" AD4-4 2.5-3	"	11/24/86	"
-03	" AD4-10 2.5-3	"	11/20/86	11/26/86
-04	" AD4-17 2-2.5	"	"	"
-05	" AD4-19 2-2.5	"	"	12/03/86
-06	" AD4-22 2-2.5	"	11/19/86	"
-07	" AD4-23 2.5-3	"	11/20/86	"
-08	" AD4-24 2.5-3	"	"	"
-09	" AD4-26 2.5-3	"	11/24/86	"
-10	" AD4-27 2.5-3	"	"	"
-11	" AE3-9 2.5-3	"	"	"
-12	" AE4-3 2.5-3	"	11/19/86	"
-13	" AE4-12 2.5-3	"	"	"
-14	" AE4-9 2-2.5	"	"	"

RESULTS

See enclosed data sheets, Forms 1-1 thru 1-14.

EXTRA COMPOUNDS

See enclosed data sheet, Form 2-1.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

Burt Sutherland

Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-1 2-2.5
Lab ID # : 8611027-01
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-4 2.5-3
Lab ID # : 8611027-02
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-10 2.5-3
Lab ID # : 8611027-03
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

* Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-17 2-2.5
Lab ID # : 8611027-04
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-19 2-2.5
Lab ID # : 8611027-05
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	** Acetone	22	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	** Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	** 2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	** Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	** 2-Hexanone	<10	U
108-10-1	** 4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	4	+
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	** Styrene	<2	U
	** Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-22 2-2.5
Lab ID # : 8611027-06
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

Indicates 624/8240 approved compound (Federal Register 10/26/84)

Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-23 2.5-3
Lab ID # : 8611027-07
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	59	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	9	+
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	14	+
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-24 2.5-3
Lab ID # : 8611027-08
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	2	+
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-26 2.5-3
Lab ID # : 8611027-09
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AD4-27 2.5-3
Lab ID # : 8611027-10
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE3-9 2.5-3
Lab ID # : 8611027-11
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE4-3 2.5-3
Lab ID # : 8611027-12
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	16	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	3	+
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE4-12 2.5-3
Lab ID # : 8611027-13
Matrix : SOIL
Released : 12/09/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	32	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	4	+
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name :365-02.04 AE4-9 2-2.5
Lab ID # :8611027-14
Matrix :SOIL
Released : 12/09/86
CAS #

Case No:NA
Tape # :NA
Rcv'd :11/26/86
Analyst:BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	3	+
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE4-9 2-2.5

ANAMETRIX NO: 8611027-14

SCAN #	NAME	Estimated Concentration UG/KG
468	1,1,3-trimethylcyclohexane	7
474	unknown	5
501	unknown	<5
566	unknown	<5
615	unknown	6

Form 2-1.

ANAMETRIX
GC/MS SPECIALISTS
ENVIRONMENTAL • ANALYTICAL SERVICES
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON
DEC 16 1986

December 11, 1986
Work Order Number 8611028
Date Received 11/26/86
PO No. 12038

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Ten soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED
8611028-01	365-02.04	COMP AD4-10 8270	11/20/86	12/02/86
-02	"	COMP AD4-11 "	"	12/01/86
-03	"	COMP AD4-13 "	"	12/02/86
-04	"	COMP AD4-14 "	"	"
-05	"	COMP AD4-15 "	"	12/01/86
-06	"	COMP AD4-16 "	"	12/02/86
-07	"	COMP AD4-17 "	"	"
-08	"	COMP AD4-18 "	"	12/10/86
-09	"	COMP AD4-19 "	"	12/02/86
-10	"	COMP AE4-1 "	"	12/01/86

RESULTS

See enclosed data sheets, Forms 2-1a thru 2-10b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-1 thru 3-5.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

ANAMETRIX

GC/MS SPECIALISTS

ENVIRONMENTAL • ANALYTICAL SERVICES

2754 AJELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

December 11, 1986

Work Order Number 8611028

Date Received 11/26/86

PO No. 12038

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Ten soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED	
8611028-11	365-02.04	COMP AD4-1	8270	11/21/86	12/02/86
-12	"	COMP AD4-5	"	"	12/03/86
-13	"	COMP AD4-6	"	"	12/01/86
-14	"	COMP AD4-7	"	"	"
-15	"	COMP AD4-8	"	"	12/10/86
-16	"	COMP AD4-9	"	"	12/08/86
-17	"	COMP AD4-12	"	"	"
-18	"	COMP AD4-23	"	"	12/02/86
-19	"	COMP AD4-24	"	"	12/03/86
-20	"	COMP AD4-2	"	11/24/86	12/08/86

RESULTS

See enclosed data sheets, Forms 2-11a thru 2-20b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-6 thru 3-10.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

Burt Sutherland

Burt Sutherland
Laboratory Manager

ANAMETRIX
GC/MS SPECIALISTS
ENVIRONMENTAL • ANALYTICAL SERVICES
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

December 11, 1986
Work Order Number 8611028
Date Received 11/26/86
PO No. 12038

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Nine soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED	
8611028-21	365-02.04	COMP AD4-3	8270	11/24/86	12/03/86
-22	"	COMP AD4-4	"	"	"
-23	"	COMP AD4-25	"	"	"
-24	"	COMP AD4-26	"	"	"
-25	"	COMP AD4-27	"	"	12/10/86
-26	"	COMP AE3-9	"	"	12/03/86
-27	"	COMP AE4-12	"	"	"
-28	"	COMP AC4-1	"	"	12/08/86
-29	"	COMP BD4-1	"	"	NA

RESULTS

See enclosed data sheets, Forms 2-21a thru 2-28b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-11 thru 3-14.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-10
Lab ID # : 8611028-01
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-10
Lab ID # : 8611028-01
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzydine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	670	+
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-11
Lab ID # : 8611028-02
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-11
Lab ID # : 8611028-02
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	470	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-13
Lab ID # : 8611028-03
Matrix : WATER
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
62-75-9	*	N-Nitrosodimethylamine	<66	U
108-95-2	*	Phenol	<66	U
62-53-3	**	Aniline	<66	U
111-44-4	*	bis(-2-Chloroethyl)Ether	<66	U
95-57-8	*	2-Chlorophenol	<66	U
541-73-1	*	1,3-Dichlorobenzene	<66	U
106-46-7	*	1,4-Dichlorobenzene	<66	U
100-51-6	**	Benzyl Alcohol	<66	U
95-50-1	*	1,2-Dichlorobenzene	<66	U
95-48-7	**	2-Methylphenol	<66	U
39638-32-9	**	bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**	4-Methylphenol	<66	U
621-64-7	*	N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	*	Hexachloroethane	<66	U
98-95-3	*	Nitrobenzene	<66	U
78-59-1	*	Isophorone	<66	U
88-75-5	*	2-Nitrophenol	<66	U
105-67-9	*	2,4-Dimethylphenol	<66	U
65-85-0	**	Benzoic Acid	<320	U
111-91-1	*	bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	*	2,4-Dichlorophenol	<66	U
120-82-1	*	1,2,4-Trichlorobenzene	<66	U
91-20-3	*	Naphthalene	<66	U
106-47-8	**	4-Chloroaniline	<66	U
87-68-3	*	Hexachlorobutadiene	<66	U
59-50-7	*	4-Chloro-3-Methylphenol	<66	U
91-57-6	**	2-Methylnaphthalene	<66	U
77-47-4	*	Hexachlorocyclopentadiene	<66	U
88-06-2	*	2,4,6-Trichlorophenol	<66	U
95-95-4	**	2,4,5-Trichlorophenol	<320	U
91-58-7	*	2-Chloronaphthalene	<66	U
88-74-4	**	2-Nitroaniline	<320	U
131-11-3	*	Dimethyl Phthalate	<66	U
208-96-8	*	Acenaphthylene	<66	U
99-09-2	**	3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-13
Lab ID # : 8611028-03
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	130	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	350	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	390	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	280	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	420	+
218-01-9	* Chrysene	330	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	410	+
207-08-9	* Benzo(k)Fluoranthene	290	+
50-32-8	* Benzo(a)Pyrene	360	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	150	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	190	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-14
Lab ID # : 8611028-04
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-14
Lab ID # : 8611028-04
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	1000	+
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-15
Lab ID # : 8611028-05
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-15
Lab ID # : 8611028-05
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2800	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-16
Lab ID # : 8611028-06
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-16
Lab ID # : 8611028-06
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	400	+
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1700	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-17
Lab ID # : 8611028-07
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-17
Lab ID # : 8611028-07
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	84	+
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	120	+
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	82	+
117-81-7	*	bis(2-Ethylhexyl)Phthalate	2300	+
218-01-9	*	Chrysene	190	+
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	110	+
207-08-9	*	Benzo(k)Fluoranthene	87	+
50-32-8	*	Benzo(a)Pyrene	80	+
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-18
Lab ID # : 8611028-08
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-18
Lab ID # : 8611028-08
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzydine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	2500	+
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-19
Lab ID # : 8611028-09
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-19
Lab ID # : 8611028-09
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	330	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-1
Lab ID # : 8611028-10
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-1
Lab ID # : 8611028-10
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	730	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-1
Lab ID # : 8611028-11
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-1
Lab ID # : 8611028-11
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BJS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	72	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	110	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	150	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	87	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	400	+
218-01-9	* Chrysene	120	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	120	+
207-08-9	* Benzo(k)Fluoranthene	100	+
50-32-8	* Benzo(a)Pyrene	130	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-5
Lab ID # : 8611028-12
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	160	+
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)
** Indicates US EPA CLP Hazardous Substance List Compound (HSL)
For reporting purposes, the following qualifiers are used:
Value + : Indicates a value greater than the instrument detection limit.
U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AD4-5
Lab ID # :8611028-12
Matrix :SOIL
Released : 12/11/86

Case No:NA
Tape # :NA
Rcv'd :11/26/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	120	+
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	470	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	500	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	500	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	330	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	300	+
218-01-9	* Chrysene	460	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	420	+
207-08-9	* Benzo(k)Fluoranthene	300	+
50-32-8	* Benzo(a)Pyrene	340	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	190	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	230	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-6
Lab ID # : 8611028-13
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-6
Lab ID # : 8611028-13
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-7
Lab ID # : 8611028-14
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-7
Lab ID # : 8611028-14
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	1000	+
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-8
Lab ID # : 8611028-15
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-8
Lab ID # : 8611028-15
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-9
Lab ID # : 8611028-16
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
62-75-9	*	N-Nitrosodimethylamine	<66	U
108-95-2	*	Phenol	<66	U
62-53-3	**	Aniline	<66	U
111-44-4	*	bis(-2-Chloroethyl)Ether	<66	U
95-57-8	*	2-Chlorophenol	<66	U
541-73-1	*	1,3-Dichlorobenzene	<66	U
106-46-7	*	1,4-Dichlorobenzene	<66	U
100-51-6	**	Benzyl Alcohol	<66	U
95-50-1	*	1,2-Dichlorobenzene	<66	U
95-48-7	**	2-Methylphenol	<66	U
39638-32-9	**	bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**	4-Methylphenol	<66	U
621-64-7	*	N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	*	Hexachloroethane	<66	U
98-95-3	*	Nitrobenzene	<66	U
78-59-1	*	Isophorone	<66	U
88-75-5	*	2-Nitrophenol	<66	U
105-67-9	*	2,4-Dimethylphenol	<66	U
65-85-0	**	Benzoic Acid	<320	U
111-91-1	*	bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	*	2,4-Dichlorophenol	<66	U
120-82-1	*	1,2,4-Trichlorobenzene	<66	U
91-20-3	*	Naphthalene	<66	U
106-47-8	**	4-Chloroaniline	<66	U
87-68-3	*	Hexachlorobutadiene	<66	U
59-50-7	*	4-Chloro-3-Methylphenol	<66	U
91-57-6	**	2-Methylnaphthalene	<66	U
77-47-4	*	Hexachlorocyclopentadiene	<66	U
88-06-2	*	2,4,6-Trichlorophenol	<66	U
95-95-4	**	2,4,5-Trichlorophenol	<320	U
91-58-7	*	2-Chloronaphthalene	<66	U
88-74-4	**	2-Nitroaniline	<320	U
131-11-3	*	Dimethyl Phthalate	<66	U
208-96-8	*	Acenaphthylene	<66	U
99-09-2	**	3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-9
Lab ID # : 8611028-16
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	79	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2000	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-12
Lab ID # : 8611028-17
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-12
Lab ID # : 8611028-17
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	94	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	88	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	120	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1100	+
218-01-9	* Chrysene	80	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	110	+
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	73	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	66	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-23
Lab ID # : 8611028-18
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-23
Lab ID # : 8611028-18
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-24
Lab ID # : 8611028-19
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-24
Lab ID # : 8611028-19
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-2
Lab ID # : 8611028-20
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-2
Lab ID # : 8611028-20
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-3
Lab ID # : 8611028-21
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-3
Lab ID # : 8611028-21
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	4000	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-4
Lab ID # : 8611028-22
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-4
Lab ID # : 8611028-22
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	260	+
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1000	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-25
Lab ID # : 8611028-23
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-25
Lab ID # : 8611028-23
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	230	+
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1000	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-26
Lab ID # : 8611028-24
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	85	+
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	140	+
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	140	+
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	200	+
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-26
Lab ID # : 8611028-24
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	400	+
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	350	+
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	530	+
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	3600	+
120-12-7	* Anthracene	600	+
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	5500	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	5300	+
85-68-7	* Butylbenzylphthalate	300	+
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	2900	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	11,000	+
218-01-9	* Chrysene	3300	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	4800	+
207-08-9	* Benzo(k)Fluoranthene	6400	+
50-32-8	* Benzo(a)Pyrene	3500	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	1400	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	1500	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

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For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-27
Lab ID # : 8611028-25
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	290	+
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-27
Lab ID # : 8611028-25
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	220	+
120-12-7	* Anthracene	330	+
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	350	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	490	+
85-68-7	* Butylbenzylphthalate	430	+
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	280	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	5000	+
218-01-9	* Chrysene	560	+
117-84-0	* Di-n-Octyl Phthalate	320	+
205-99-2	* Benzo(b)Fluoranthene	520	+
207-08-9	* Benzo(k)Fluoranthene	290	+
50-32-8	* Benzo(a)Pyrene	500	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	700	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	1400	+

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-9
Lab ID # : 8611028-26
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-9
Lab ID # : 8611028-26
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BJS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	4000	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-12
Lab ID # : 8611028-27
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	270	+
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-12
Lab ID # : 8611028-27
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AC4-1
Lab ID # : 8611028-28
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	87	+
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	89	+
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AC4-1
Lab ID # : 8611028-28
Matrix : SOIL
Released : 12/11/86

Case No: NA
Tape # : NA
Rcv'd : 11/26/86
Analyst: BWS BJS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	670	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-10

ANAMETRIX NO: 8611028-01

SCAN #	NAME	Estimated Concentration UG/KG
1235	2,6,10,14-tetramethylheptadecane	100
1646	pentacosane	190
1696	hexacosane	210
1744	heptacosane	250
1791	octacosane	200
1838	nonacosane	170

Form 3-1.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-13

ANAMETRIX NO: 8611028-03

SCAN #	NAME	Estimated Concentration UG/KG
1236	2,6,10,14-tetramethylheptadecane	100
1561	docosane	200
1699	hexacosane	700
1776	heptacosane	500

Form 3-2.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-17

ANAMETRIX NO: 8611028-07

SCAN #	NAME	Estimated Concentration UG/KG
1483	heneicosane	250
1530	1,1':3',1"-terphenyl	380
1540	docosane	270
1555	terphenyl	440
1594	tetracosane	450
1646	pentacosane	660
1696	hexacosane	820
1744	heptacosane	850
1791	octacosane	850
1838	nonacosane	670

Form 3-3.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-18

ANAMETRIX NO: 8611028-08

SCAN #	NAME	Estimated Concentration UG/KG
1091	heptadecane	280
1166	2,6,10,14-tetramethylheptadecane	360
1235	octadecane	300
1292	nonadecane	240
1353	eicosane	240
1412	heneicosane	300
1468	docosane	200
1521	tetracosane	200

Form 3-4.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-19

ANAMETRIX NO: 8611028-09

SCAN #	NAME	Estimated Concentration UG/KG
1595	tetracosane	180
1647	pentacosane	230
1697	hexacosane	230
1745	heptacosane	190
1792	octacosane	210
1839	nonacosane	200

Form 3-5.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-1

ANAMETRIX NO: 8611028-11

SCAN #	NAME	Estimated Concentration UG/KG
1160	hexadecane	90
1198	chlorotris(2-methylpropyl)stannane	260
1236	2,6,10,14-tetramethylheptadecane	80
1363	nonadecane	80
1485	heneicosane	80
1594	tetracosane	190
1696	hexacosane	220
1792	octacosane	260

Form 3-6.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-5

ANAMETRIX NO: 8611028-12

SCAN #	NAME	Estimated Concentration UG/KG
1085	pentadecane	6800
1161	hexadecane	7600
1232	2,6,10,14-tetramethylheptadecane	8900
1237	2,6,10-trimethylhexadecane	6900
1300	octadecane	9400
1365	nonadecane	7600
1426	eicosane	7600
1484	heneicosane	6000
1540	docosane	5100
1595	tetracosane	3700

Form 3-7.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-8

ANAMETRIX NO: 8611028-15

SCAN #	NAME	Estimated Concentration UG/KG
1165	2,6,10,14-tetramethylheptadecane	180
1235	octadecane	170
1411	heneicosane	120

Form 3-8.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-9

ANAMETRIX NO: 8611028-16

SCAN #	NAME	Estimated Concentration UG/KG
1059	pentadecane	300
1134	hexadecane	420
1210	2,6,10,14-tetramethylheptadecane	460
1272	octadecane	360
1337	nonadecane	290
1398	eicosane	260
1457	heneicosane	240
1513	docosane	180
1669	hexacosane	130

Form 3-9.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-23

ANAMETRIX NO: 8611028-18

SCAN #	NAME	Estimated Concentration UG/KG
1235	2,6,10,14-tetramethylheptadecane	90
1298	octadecane	60
1362	nonadecane	60
1424	eicosane	60
1483	heneicosane	60

Form 3-10.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-26

ANAMETRIX NO: 8611028-24

SCAN #	NAME	Estimated Concentration UG/KG
621	1,2,3-trimethylbenzene	1300
654	1,2,4-trimethylbenzene	550
733	undecane	850
1030	unknown	1300
1199	chlorotris(2-methylpropyl)stannane	5300
1400	hexadecanoicacid	930
1519	nonadecanoicacid	670
1839	octacosane	1100
1894	nonacosane	990
1920	benzo[j]fluoroanthene	570

Form 3-11.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-27

ANAMETRIX NO: 8611028-25

SCAN #	NAME	Estimated Concentration UG/KG
529	2,2-oxybisethanol	700
1265	9h-carbazole	180
1297	1,1':2',1:-terphenyl	410
1412	heneicosane	150
1453	1,1':3',1"-terphenyl	1700
1477	terphenyl	2300
1521	pentacosane	280
1671	heptacosane	390
1717	octacosane	280
1831	benz[e]acephenanthrylene	400

Form 3-12.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE3-9

ANAMETRIX NO: 8611028-26

SCAN #	NAME	Estimated Concentration UG/KG
1158	hexadecane	120
1194	heptadecane	110
1234	2,6,10,14-tetramethylheptadecane	180
1297	octadecane	140
1362	nonadecane	130
1423	eicosane	150
1482	heneicosane	160
1539	docosane	110
1593	tetracosane	110
1646	pentacosane	100

Form 3-13.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE4-12

ANAMETRIX NO: 8611028-27

SCAN #	NAME	Estimated Concentration UG/KG
1489	hexachlorobiphenyl	23,000
1516	hexachlorobiphenyl	30,000
1560	hexachlorobiphenyl	13,000
1575	hexachlorobiphenyl	24,000
1590	hexachlorobiphenyl	49,000
1619	hexachlorobiphenyl	53,000
1633	hexachlorobiphenyl	21,000
1652	hexachlorobiphenyl	50,000
1670	heptachlorobiphenyl	35,000
1697	heptachlorobiphenyl	30,000
1729	heptachlorobiphenyl	45,000
1762	heptachlorobiphenyl	27,000
1770	octachlorobiphenyl	16,000
1777	octachlorobiphenyl	22,000
1811	octachlorobiphenyl	7,500
1832	octachlorobiphenyl	15,000

Form 3-14.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD2-1

ANAMETRIX NO: 8612007-15

SCAN #	NAME	Estimated Concentration UG/KG
514	1-ethyl-3-methylbenzene	2000
523	1,3,5-trimethylbenzene	2400
536	1-ethyl-2-methylbenzene	1400
552	1,2,3-trimethylbenzene	5800
585	1,2,4-trimethylbenzene	2300
658	unknown	800
1127	2-methylpropylchlorotrisstannane	4300
1138	unknown	520
1353	eicosane	260
1814	benzo[j]fluoranthene	560

Form 3-11.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE2-1

ANAMETRIX NO: 8612007-16

SCAN #	NAME	Estimated Concentration UG/KG
537	unknown	1000
1164	2,6,10,14-tetramethylheptadecane	170
1234	octadecane	170
1410	heneicosane	170

Form 3-12.

ANAMETRIX

GC/MS SPECIALISTS

ENVIRONMENTAL • ANALYTICAL SERVICES

2754 AJELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON**DEC 10 1986**

November 26, 1986

Work Order Number 8611021

Date Received 11/21/86

PO No. 12134

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Nine soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED
8611021-01	365-02.04	COMP AD4-20 8270	11/19/86	11/25/86
-02	"	COMP AD4-21 "	"	"
-03	"	COMP AD4-22 "	"	"
-04	"	COMP AE4-2 "	"	"
-05	"	COMP AE4-3 "	"	"
-06	"	COMP AE4-5 "	"	"
-07	"	COMP AE4-6 "	"	"
-08	"	COMP AE4-7 "	"	"
-09	"	COMP AE4-8 "	"	"

RESULTS

See enclosed data sheets, Forms 2-1a thru 2-9b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-1 thru 3-5.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-20
Lab ID # : 8611021-01
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-20
Lab ID # : 8611021-01
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	79	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	800	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AD4-21
Lab ID # :8611021-02
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/21/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-21
Lab ID # : 8611021-02
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	120	+
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	100	+
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-22
Lab ID # : 8611021-03
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD4-22
Lab ID # : 8611021-03
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg
83-32-9	* Acenaphthene	<66 U
51-28-5	* 2,4-Dinitrophenol	<320 U
100-02-7	* 4-Nitrophenol	<320 U
132-64-9	**Dibenzofuran	<66 U
121-14-2	* 2,4-Dinitrotoluene	<66 U
606-20-2	* 2,6-Dinitrotoluene	<66 U
84-66-2	* Diethylphthalate	<66 U
7005-72-3	* 4-Chlorophenyl-phenylether	<66 U
86-73-7	* Fluorene	<66 U
100-01-6	**4-Nitroaniline	<320 U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320 U
86-30-6	* N-Nitrosodiphenylamine	<66 U
122-66-7	**1,2-Diphenylhydrazine	<66 U
101-55-3	* 4-Bromophenyl-phenylether	<66 U
118-74-1	* Hexachlorobenzene	<66 U
87-86-5	* Pentachlorophenol	<320 U
85-01-8	* Phenanthrene	<66 U
120-12-7	* Anthracene	<66 U
84-74-2	* Di-n-Butylphthalate	<66 U
206-44-0	* Fluoranthene	<66 U
92-87-5	* Benzidine	<320 U
129-00-0	* Pyrene	<66 U
85-68-7	* Butylbenzylphthalate	<66 U
91-94-1	* 3,3'-Dichlorobenzidine	<132 U
56-55-3	* Benzo(a)Anthracene	<66 U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1000 +
218-01-9	* Chrysene	<66 U
117-84-0	* Di-n-Octyl Phthalate	<66 U
205-99-2	* Benzo(b)Fluoranthene	<66 U
207-08-9	* Benzo(k)Fluoranthene	<66 U
50-32-8	* Benzo(a)Pyrene	<66 U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66 U
53-70-3	* Dibenz(a,h)Anthracene	<66 U
191-24-2	* Benzo(g,h,i)Perylene	<66 U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-2
Lab ID # : 8611021-04
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-2
Lab ID # : 8611021-04
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-3
Lab ID # : 8611021-05
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BJS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE4-3
Lab ID # :8611021-05
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/21/86
Analyst:BWS BJS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-5
Lab ID # : 8611021-06
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE4-5
Lab ID # :8611021-06
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/21/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	4700	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-6
Lab ID # : 8611021-07
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE4-6
Lab ID # :8611021-07
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/21/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)
** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-7
Lab ID # : 8611021-08
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-7
Lab ID # : 8611021-08
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1500	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	120	+
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE4-8
Lab ID # :8611021-09
Matrix :SOIL
Released : 12/09/86

Case No:NA
Tape # :NA
Rcv'd :11/21/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE4-8
Lab ID # : 8611021-09
Matrix : SOIL
Released : 12/09/86

Case No: NA
Tape # : NA
Rcv'd : 11/21/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-20

ANAMETRIX NO: 8611021-01

SCAN #	NAME	Estimated Concentration UG/KG
1235	2,6,10,14-tetramethylheptadecane	120
1298	octadecane	110
1363	nonadecane	110
1424	eicosane	130
1483	heneicosane	150
1539	docosane	130
1646	pentacosane	150
1696	hexacosane	160

Form 3-1.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AD4-22

ANAMETRIX NO: 8611021-03

SCAN #	NAME	Estimated Concentration UG/KG
1159	hexadecane	270
1195	heptadecane	200
1235	2,6,10,14-tetramethylheptadecane	450
1298	octadecane	230
1362	nonadecane	190
1424	eicosane	160
1483	heneicosane	270
1539	docosane	90

Form 3-2.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE4-5

ANAMETRIX NO: 8611021-06

SCAN #	NAME	Estimated Concentration UG/KG
1483	heneicosane	450
1539	docosane	590
1593	tetracosane	700
1646	pentacosane	750
1696	hexacosane	840
1744	heptacosane	770
1791	octacosane	790
1838	nonacosane	600

Form 3-3.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE4-7

ANAMETRIX NO: 8611021-08

SCAN #	NAME	Estimated Concentration UG/KG
1483	heneicosane	390
1539	docosane	970
1594	tetracosane	1600
1646	pentacosane	2300
1696	hexacosane	2700
1744	heptacosane	2500
1791	octacosane	2300
1838	nonacosane	1600

Form 3-4.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE4-8

ANAMETRIX NO: 8611021-09

SCAN #	NAME	Estimated Concentration UG/KG
1195	heptadecane	140
1235	2,6,10,14-tetramethylheptadecane	270
1483	heneicosane	130

Form 3-5.

ANAMETRIX

GC/MS SPECIALISTS

ENVIRONMENTAL • ANALYTICAL SERVICES

2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

December 1, 1986

Work Order Number 8611020

Date Received 11/20/86

PO No. 12132

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Ten soil composites were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED	
8611020-11	365-02.04	AF3-2	8270	11/17/86	11/21/86
-12	"	AF3-3	"	"	"
-13	"	AE3-1	"	11/18/86	11/24/86
-14	"	AE3-3	"	"	"
-15	"	AE3-4	"	"	"
-16	"	AE4-4	"	"	"
-17	"	AE4-9	"	"	"
-18	"	AE4-10	"	"	"
-19	"	AE4-11	"	"	"
-20	"	AF4-1	"	"	"

RESULTS

See enclosed data sheets, Forms 2-11a thru 2-20b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-3 thru 3-9.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-2
Lab ID # : 8611020-05
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-2
Lab ID # : 8611020-05
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	170	+
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	530	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-5
Lab ID # : 8611020-06
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-5
Lab ID # : 8611020-06
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	600	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-6
Lab ID # : 8611020-07
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-6
Lab ID # : 8611020-07
Matrix : SOIL
Released : 12/02/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

CAS #		SEMIVOLATILE COMPOUNDS		ug/kg
83-32-9	* Acenaphthene	<66	U	
51-28-5	* 2,4-Dinitrophenol	<320	U	
100-02-7	* 4-Nitrophenol	<320	U	
132-64-9	**Dibenzofuran	<66	U	
121-14-2	* 2,4-Dinitrotoluene	<66	U	
606-20-2	* 2,6-Dinitrotoluene	<66	U	
84-66-2	* Diethylphthalate	<66	U	
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U	
86-73-7	* Fluorene	<66	U	
100-01-6	**4-Nitroaniline	<320	U	
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U	
86-30-6	* N-Nitrosodiphenylamine	<66	U	
122-66-7	**1,2-Diphenylhydrazine	<66	U	
101-55-3	* 4-Bromophenyl-phenylether	<66	U	
118-74-1	* Hexachlorobenzene	<66	U	
87-86-5	* Pentachlorophenol	<320	U	
85-01-8	* Phenanthrene	<66	U	
120-12-7	* Anthracene	<66	U	
84-74-2	* Di-n-Butylphthalate	260	+	
206-44-0	* Fluoranthene	190	+	
92-87-5	* Benzidine	<320	U	
129-00-0	* Pyrene	180	+	
85-68-7	* Butylbenzylphthalate	<66	U	
91-94-1	* 3,3'-Dichlorobenzidine	<132	U	
56-55-3	* Benzo(a)Anthracene	<66	U	
117-81-7	* bis(2-Ethylhexyl)Phthalate	230	+	
218-01-9	* Chrysene	81	+	
117-84-0	* Di-n-Octyl Phthalate	<66	U	
205-99-2	* Benzo(b)Fluoranthene	120	+	
207-08-9	* Benzo(k)Fluoranthene	<66	U	
50-32-8	* Benzo(a)Pyrene	<66	U	
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U	
53-70-3	* Dibenz(a,h)Anthracene	<66	U	
191-24-2	* Benzo(g,h,i)Perylene	<66	U	

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-7
Lab ID # : 8611020-08
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-7
Lab ID # : 8611020-08
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	600	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-8
Lab ID # : 8611020-09
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-8
Lab ID # : 8611020-09
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1700	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF3-1
Lab ID # : 8611020-10
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ethe	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methan	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF3-1
Lab ID # : 8611020-10
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg
83-32-9	* Acenaphthene	<66 U
51-28-5	* 2,4-Dinitrophenol	<320 U
100-02-7	* 4-Nitrophenol	<320 U
132-64-9	**Dibenzofuran	<66 U
121-14-2	* 2,4-Dinitrotoluene	<66 U
606-20-2	* 2,6-Dinitrotoluene	<66 U
84-66-2	* Diethylphthalate	<66 U
7005-72-3	* 4-Chlorophenyl-phenylether	<66 U
86-73-7	* Fluorene	<66 U
100-01-6	**4-Nitroaniline	<320 U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320 U
86-30-6	* N-Nitrosodiphenylamine	<66 U
122-66-7	**1,2-Diphenylhydrazine	<66 U
101-55-3	* 4-Bromophenyl-phenylether	<66 U
118-74-1	* Hexachlorobenzene	<66 U
87-86-5	* Pentachlorophenol	<320 U
85-01-8	* Phenanthrene	<66 U
120-12-7	* Anthracene	<66 U
84-74-2	* Di-n-Butylphthalate	<66 U
206-44-0	* Fluoranthene	<66 U
92-87-5	* Benzidine	<320 U
129-00-0	* Pyrene	<66 U
85-68-7	* Butylbenzylphthalate	<66 U
91-94-1	* 3,3'-Dichlorobenzidine	<132 U
56-55-3	* Benzo(a)Anthracene	<66 U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1500 +
218-01-9	* Chrysene	<66 U
117-84-0	* Di-n-Octyl Phthalate	<66 U
205-99-2	* Benzo(b)Fluoranthene	<66 U
207-08-9	* Benzo(k)Fluoranthene	<66 U
50-32-8	* Benzo(a)Pyrene	<66 U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66 U
53-70-3	* Dibenzo(a,h)Anthracene	<66 U
191-24-2	* Benzo(g,h,i)Perylene	<66 U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF3-2
Lab ID # : 8611020-11
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF3-2
Lab ID # : 8611020-11
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2700	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	200	+
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF3-3
Lab ID # : 8611020-12
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	93	+
106-46-7	* 1,4-Dichlorobenzene	88	+
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF3-3
Lab ID # : 8611020-12
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	95	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2400	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	100	+
207-08-9	* Benzo(k)Fluoranthene	91	+
50-32-8	* Benzo(a)Pyrene	74	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	66	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-1
Lab ID # : 8611020-13
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-1
Lab ID # : 8611020-13
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BJS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1200	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-3
Lab ID # : 8611020-14
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 AE3-3
Lab ID # :8611020-14
Matrix :SOIL
Released : 12/01/86

Case No:NA
Tape # :NA
Rcv'd :11/20/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1300	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-4
Lab ID # : 8611020-15
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE3-4
Lab ID # : 8611020-15
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	68	+
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-4
Lab ID # : 8611020-16
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-4
Lab ID # : 8611020-16
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	6300	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-9
Lab ID # : 8611020-17
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-9
Lab ID # : 8611020-17
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1600	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-10
Lab ID # : 8611020-18
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-10
Lab ID # : 8611020-18
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg
83-32-9	* Acenaphthene	<66 U
51-28-5	* 2,4-Dinitrophenol	<320 U
100-02-7	* 4-Nitrophenol	<320 U
132-64-9	**Dibenzofuran	<66 U
121-14-2	* 2,4-Dinitrotoluene	<66 U
606-20-2	* 2,6-Dinitrotoluene	<66 U
84-66-2	* Diethylphthalate	<66 U
7005-72-3	* 4-Chlorophenyl-phenylether	<66 U
86-73-7	* Fluorene	<66 U
100-01-6	**4-Nitroaniline	<320 U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320 U
86-30-6	* N-Nitrosodiphenylamine	<66 U
122-66-7	**1,2-Diphenylhydrazine	<66 U
101-55-3	* 4-Bromophenyl-phenylether	<66 U
118-74-1	* Hexachlorobenzene	<66 U
87-86-5	* Pentachlorophenol	<320 U
85-01-8	* Phenanthrene	<66 U
120-12-7	* Anthracene	<66 U
84-74-2	* Di-n-Butylphthalate	<66 U
206-44-0	* Fluoranthene	<66 U
92-87-5	* Benzidine	<320 U
129-00-0	* Pyrene	<66 U
85-68-7	* Butylbenzylphthalate	<66 U
91-94-1	* 3,3'-Dichlorobenzidine	<132 U
56-55-3	* Benzo(a)Anthracene	<66 U
117-81-7	* bis(2-Ethylhexyl)Phthalate	6700 +
218-01-9	* Chrysene	<66 U
117-84-0	* Di-n-Octyl Phthalate	<66 U
205-99-2	* Benzo(b)Fluoranthene	<66 U
207-08-9	* Benzo(k)Fluoranthene	<66 U
50-32-8	* Benzo(a)Pyrene	<66 U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66 U
53-70-3	* Dibenz(a,h)Anthracene	<66 U
191-24-2	* Benzo(g,h,i)Perylene	<66 U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-11
Lab ID # : 8611020-19
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AE4-11
Lab ID # : 8611020-19
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1400	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF4-1
Lab ID # : 8611020-20
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AF4-1
Lab ID # : 8611020-20
Matrix : SOIL
Released : 12/01/86

Case No: NA
Tape # : NA
Rcv'd : 11/20/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE3-2

ANAMETRIX NO: 8611020-05

SCAN #	NAME	Estimated Concentration UG/KG
1439	heneicosane	230
1495	docosane	190
1549	tetracosane	350
1601	pentacosane	350
1652	hexacosane	480
1700	heptacosane	350

Form 3-2.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AF3-2

ANAMETRIX NO: 8611020-11

SCAN #	NAME	Estimated Concentration UG/KG
1651	pentacosane	200
1700	hexacosane	220
1747	heptacosane	180
1792	octacosane	210

Form 3-3.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AF3-3

ANAMETRIX NO: 8611020-12

SCAN #	NAME	Estimated Concentration UG/KG
1193	unknown	370
1199	unknown	300
1204	unknown	340
1209	4-nonylphenol	270
1219	unknown	190
1231	4-tetramethylbutylphenol	220

Form 3-4.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE3-1

ANAMETRIX NO: 8611020-13

SCAN #	NAME	Estimated Concentration UG/KG
1747	heptacosane	150
1837	nonacosane	290
1953	unknown	230

Form 3-5.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE3-4

ANAMETRIX NO: 8611020-15

SCAN #	NAME	Estimated Concentration UG/KG
589	decane	640
695	undecane	870
792	dodecane	1800
805	2,6-dimethylundecane	1000
857	7-methyltridecane	1600
881	tridecane	2600
946	unknown	3200
964	tetradecane	5100
1014	4,11-dimethyltetradecane	2500
1043	pentadecane	3000
1117	hexadecane	720

Form 3-6.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE4-4

ANAMETRIX NO: 8611020-16

SCAN #	NAME	Estimated Concentration UG/KG
1117	hexadecane	80
1193	2,6,10,14-tetramethylheptadecane	180
1602	pentacosane	130
1652	hexacosane	130
1700	heptacosane	110
1747	octacosane	110

Form 3-7.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE4-9

ANAMETRIX NO: 8611020-17

SCAN #	NAME	Estimated Concentration UG/KG
1193	2,6,10,14-tetramethylheptadecane	590
1382	eicosane	710
1441	heneicosane	1800
1497	docosane	5300
1551	tetracosane	7200
1604	pentacosane	8500
1654	hexacosane	9000
1702	heptacosane	9000
1749	octacosane	6700
1794	nonacosane	6100

Form 3-8.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AE4-10

ANAMETRIX NO: 8611020-18

SCAN #	NAME	Estimated Concentration UG/KG
1118	hexadecane	170
1193	2,6,10,14-tetramethylheptadecane	230
1441	heneicosane	250
1551	tetracosane	220
1603	pentacosane	200
1653	hexacosane	300

Form 3-9.

ANAMETRIX
GC/MS SPECIALISTS
ENVIRONMENTAL • ANALYTICAL SERVICES
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON
DEC 16 1986

December 15, 1986
Work Order Number 8612007
Date Received 12/05/86
PO No. 12184

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Ten soil samples were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED	
8612007-01	365-02.04	COMP BG3-1	8270	12/01/86	12/10/86
-02	"	COMP BF3-9	"	"	"
-03	"	COMP BF2-2	"	"	"
-04	"	COMP BE3-6	"	"	"
-05	"	COMP BB2-2	"	12/02/86	"
-06	"	COMP BB2-7	"	"	12/11/86
-07	"	COMP BB2-11	"	"	"
-08	"	COMP BB2-8	"	"	"
-09	"	COMP BB3-1	"	"	12/10/86
-10	"	COMP BC2-2	"	"	12/11/86

RESULTS

See enclosed data sheets, Forms 2-1a thru 2-10b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-1 thru 3-7.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

ANAMETRIX

GC/MS SPECIALISTS

ENVIRONMENTAL • ANALYTICAL SERVICES

2754 AJELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

December 15, 1986

Work Order Number 8612007

Date Received 12/05/86

PO No. 12184

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Eight soil samples were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED
8612007-11	365-02.04	COMP AE3-10 8270	12/03/86	12/10/86
-12	"	COMP AE2-2 "	"	12/11/86
-13	"	COMP AE2-3 "	"	"
-14	"	COMP AE2-4 "	"	"
-15	"	COMP AD2-1 "	"	"
-16	"	COMP AE2-1 "	"	"
-17	"	AE3-10 2-2.5 8240	"	12/10/86
-18	"	AE2-4 3-3.5 "	"	"

RESULTS

See enclosed data sheets, Forms 2-11a thru 1-18.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 3-8 thru 3-12.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX.

Sincerely,



Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BG3-1
Lab ID # : 8612007-01
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BG3-1
Lab ID # : 8612007-01
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

CAS #		SEMIVOLATILE COMPOUNDS	ug/kg	
83-32-9	*	Acenaphthene	<66	U
51-28-5	*	2,4-Dinitrophenol	<320	U
100-02-7	*	4-Nitrophenol	<320	U
132-64-9	**	Dibenzofuran	<66	U
121-14-2	*	2,4-Dinitrotoluene	<66	U
606-20-2	*	2,6-Dinitrotoluene	<66	U
84-66-2	*	Diethylphthalate	<66	U
7005-72-3	*	4-Chlorophenyl-phenylether	<66	U
86-73-7	*	Fluorene	<66	U
100-01-6	**	4-Nitroaniline	<320	U
534-52-1	**	4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	*	N-Nitrosodiphenylamine	<66	U
122-66-7	**	1,2-Diphenylhydrazine	<66	U
101-55-3	*	4-Bromophenyl-phenylether	<66	U
118-74-1	*	Hexachlorobenzene	<66	U
87-86-5	*	Pentachlorophenol	<320	U
85-01-8	*	Phenanthrene	<66	U
120-12-7	*	Anthracene	<66	U
84-74-2	*	Di-n-Butylphthalate	<66	U
206-44-0	*	Fluoranthene	<66	U
92-87-5	*	Benzidine	<320	U
129-00-0	*	Pyrene	<66	U
85-68-7	*	Butylbenzylphthalate	<66	U
91-94-1	*	3,3'-Dichlorobenzidine	<132	U
56-55-3	*	Benzo(a)Anthracene	<66	U
117-81-7	*	bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	*	Chrysene	<66	U
117-84-0	*	Di-n-Octyl Phthalate	<66	U
205-99-2	*	Benzo(b)Fluoranthene	<66	U
207-08-9	*	Benzo(k)Fluoranthene	<66	U
50-32-8	*	Benzo(a)Pyrene	<66	U
193-39-5	*	Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	*	Dibenz(a,h)Anthracene	<66	U
191-24-2	*	Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BF3-9
Lab ID # : 8612007-02
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BF3-9
Lab ID # : 8612007-02
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1100	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BF2-2
Lab ID # : 8612007-03
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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Value + : Indicates a value greater than the instrument detection limit.

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BF2-2
Lab ID # : 8612007-03
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	80	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	80	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	76	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BE3-6
Lab ID # : 8612007-04
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BE3-6
Lab ID # : 8612007-04
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1800	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-2
Lab ID # : 8612007-05
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

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** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-2
Lab ID # : 8612007-05
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	470	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	80	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-7
Lab ID # : 8612007-06
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *لحم*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-7
Lab ID # : 8612007-06
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS			ug/kg
CAS #			
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	470	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	730	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	540	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	130	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	830	+
218-01-9	* Chrysene	140	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	200	+
207-08-9	* Benzo(k)Fluoranthene	120	+
50-32-8	* Benzo(a)Pyrene	210	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	130	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	170	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-11
Lab ID # : 8612007-07
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	960	+
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	1100	+
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-11
Lab ID # : 8612007-07
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	560	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	220	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	230	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	88	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	3000	+
218-01-9	* Chrysene	290	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	150	+
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	81	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-8
Lab ID # : 8612007-08
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

- * Indicates 8270 approved compound (Federal Register 10/26/84)
** Indicates US EPA CLP Hazardous Substance List Compound (HSL)
For reporting purposes, the following qualifiers are used:
Value + : Indicates a value greater than the instrument detection limit.
U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB2-8
Lab ID # : 8612007-08
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	670	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB3-1
Lab ID # : 8612007-09
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BB3-1
Lab ID # : 8612007-09
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1800	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP BC2-2
Lab ID # : 8612007-10
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP BC2-2
Lab ID # :8612007-10
Matrix :SOIL
Released : 12/15/86

Case No:NA
Tape # :NA
Rcv'd :12/05/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	1500	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-10
Lab ID # : 8612007-11
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE3-10
Lab ID # : 8612007-11
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg
83-32-9	* Acenaphthene	<66 U
51-28-5	* 2,4-Dinitrophenol	<320 U
100-02-7	* 4-Nitrophenol	<320 U
132-64-9	**Dibenzofuran	<66 U
121-14-2	* 2,4-Dinitrotoluene	<66 U
606-20-2	* 2,6-Dinitrotoluene	<66 U
84-66-2	* Diethylphthalate	<66 U
7005-72-3	* 4-Chlorophenyl-phenylether	<66 U
86-73-7	* Fluorene	<66 U
100-01-6	**4-Nitroaniline	<320 U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320 U
86-30-6	* N-Nitrosodiphenylamine	<66 U
122-66-7	**1,2-Diphenylhydrazine	<66 U
101-55-3	* 4-Bromophenyl-phenylether	<66 U
118-74-1	* Hexachlorobenzene	<66 U
87-86-5	* Pentachlorophenol	<320 U
85-01-8	* Phenanthrene	69 +
120-12-7	* Anthracene	<66 U
84-74-2	* Di-n-Butylphthalate	<66 U
206-44-0	* Fluoranthene	72 +
92-87-5	* Benzidine	<320 U
129-00-0	* Pyrene	<66 U
85-68-7	* Butylbenzylphthalate	<66 U
91-94-1	* 3,3'-Dichlorobenzidine	<132 U
56-55-3	* Benzo(a)Anthracene	<66 U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2200 +
218-01-9	* Chrysene	<66 U
117-84-0	* Di-n-Octyl Phthalate	<66 U
205-99-2	* Benzo(b)Fluoranthene	<66 U
207-08-9	* Benzo(k)Fluoranthene	<66 U
50-32-8	* Benzo(a)Pyrene	<66 U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66 U
53-70-3	* Dibenz(a,h)Anthracene	<66 U
191-24-2	* Benzo(g,h,i)Perylene	<66 U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-2
Lab ID # : 8612007-12
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-2
Lab ID # : 8612007-12
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	88	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-3
Lab ID # : 8612007-13
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-3
Lab ID # : 8612007-13
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	74	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-4
Lab ID # : 8612007-14
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	130	+
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	342	+
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-4
Lab ID # : 8612007-14
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	65	+
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	160	+
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	870	+
218-01-9	* Chrysene	92	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD2-1
Lab ID # : 8612007-15
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	87	+
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AD2-1
Lab ID # : 8612007-15
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	120	+
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	67	+
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	130	+
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	1000	+
120-12-7	* Anthracene	220	+
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	1400	+
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	760	+
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	450	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	2700	+
218-01-9	* Chrysene	460	+
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	600	+
207-08-9	* Benzo(k)Fluoranthene	360	+
50-32-8	* Benzo(a)Pyrene	520	+
193-39-5	* Indeno(1,2,3-cd)Pyrene	220	+
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	210	+

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name :365-02.04 COMP AE2-1
Lab ID # :8612007-16
Matrix :SOIL
Released : 12/15/86

Case No:NA
Tape # :NA
Rcv'd :12/05/86
Analyst:BWS BWS

SEMIVOLATILE COMPOUNDS		ug/kg	
CAS #			
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 COMP AE2-1
Lab ID # : 8612007-16
Matrix : SOIL
Released : 12/15/86

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	830	+
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

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U : Indicates instrument detection limit.

JAN 30 1987

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE3-10 2-2.5
Lab ID # : 8612007-17
Matrix : SOIL
Released : 01/29/87
CAS #

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS ~~BS~~
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	50	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE3-10 2-2.5
Lab ID # : 8612007-17
Matrix : SOIL
Released : 12/15/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*
ug/L

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	50	+
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE2-4 3-3.5
Lab ID # : 8612007-18
Matrix : SOIL
Released : 01/29/87
CAS #

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS BWS
ug/kg

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anametrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Lab Name : 365-02.04 AE2-4 3-3.5
Lab ID # : 8612007-18
Matrix : SOIL
Released : 12/15/86
CAS #

Case No: NA
Tape # : NA
Rcv'd : 12/05/86
Analyst: BWS *BWS*
ug/L

74-87-3	* Chloromethane	<7	U
74-83-9	* Bromomethane	<7	U
75-01-4	* Vinyl Chloride	<7	U
75-00-3	* Chloroethane	<7	U
75-09-2	* Methylene Chloride	<2	U
67-64-1	**Acetone	<10	U
79-69-4	* Trichlorofluoromethane	<2	U
75-15-0	**Carbondisulfide	<2	U
75-35-4	* 1,1-Dichloroethene	<2	U
75-34-3	* 1,1-Dichloroethane	<2	U
156-60-5	* Trans-1,2-Dichloroethene	<2	U
67-66-3	* Chloroform	<2	U
76-13-1	Trichlorotrifluoroethane	<2	U
107-06-2	* 1,2-Dichloroethane	<2	U
78-93-3	**2-Butanone	<10	U
71-55-6	* 1,1,1-Trichloroethane	<2	U
56-23-5	* Carbon Tetrachloride	<2	U
108-05-4	**Vinyl Acetate	<10	U
75-27-4	* Bromodichloromethane	<2	U
78-87-5	* 1,2-Dichloropropane	<2	U
10061-02-6	* Trans-1,3-Dichloropropene	<2	U
79-01-6	* Trichloroethene	<2	U
124-48-1	* Dibromochloromethane	<2	U
79-00-5	* 1,1,2-Trichloroethane	<2	U
71-43-2	* Benzene	<2	U
10061-01-5	* cis-1,3-Dichloropropene	<2	U
110-75-8	* 2-Chloroethylvinylether	<2	U
75-25-2	* Bromoform	<2	U
591-78-6	**2-Hexanone	<10	U
108-10-1	**4-Methyl-2-Pentanone	<10	U
127-18-4	* Tetrachloroethene	<2	U
79-34-5	* 1,1,2,2-Tetrachloroethane	<2	U
108-88-3	* Toluene	<2	U
108-90-7	* Chlorobenzene	<2	U
100-41-4	* Ethylbenzene	<2	U
100-42-5	**Styrene	<2	U
	**Total Xylenes	<2	U
541-73-1	* 1,3-Dichlorobenzene	<2	U
95-50-1	* 1,2-Dichlorobenzene	<2	U
106-46-7	* 1,4-Dichlorobenzene	<2	U

Data Reporting Qualifiers

* Indicates 624/8240 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

No indication refers to compounds added by Anamatrix, Inc.

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BE3-6

ANAMETRIX NO: 8612007-04

SCAN #	NAME	Estimated Concentration UG/KG
1165	2,6,10,14-tetramethylheptadecane	180
1234	octadecane	150
1411	heneicosane	150
1520	pentacosane	180
1669	heptacosane	250

Form 3-1.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BB2-2

ANAMETRIX NO: 8612007-05

SCAN #	NAME	Estimated Concentration UG/KG
671	undecane	140
767	dodecane	100
1017	pentadecane	180
1091	hexadecane	260
1166	2,6,10,14-tetramethylheptadecane	390
1235	octadecane	240
1292	nonadecane	200
1353	eicosane	200
1411	heneicosane	240

Form 3-2.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BB2-7

ANAMETRIX NO: 8612007-06

SCAN #	NAME	Estimated Concentration UG/KG
937	tetradecane	170
1016	pentadecane	260
1165	2,6,10,14-tetramethylheptadecane	470
1234	octadecane	340
1291	nonadecane	150
1410	heneicosane	160

Form 3-3.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BB2-11

ANAMETRIX NO: 8612007-07

SCAN #	NAME	Estimated Concentration UG/KG
558	1,2,3-trimethylbenzene	1900
590	1,2,4-trimethylbenzene	3400
673	undecane	2700
781	6-methyldodecane	1500
921	5-propyltridecane	2400
1127	heptadecane	2000
1167	2,6,10,14-tetramethylheptadecane	3300
1237	octadecane	2600
1455	1,1':3'1"-terphenyl	3900
1479	terphenyl	2900

Form 3-4.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BB2-8

ANAMETRIX NO: 8612007-08

SCAN #	NAME	Estimated Concentration UG/KG
566	decane	780
671	undecane	740
767	dodecane	390
1118	2-methylbenzenesulfonamide	470
1149	4-methylbenzenesulfonamide	2200
1923	unknown	1700
1979	unknown	1600
2054	unknown	850
2121	unknown	430

Form 3-5.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BB3-1

ANAMETRIX NO: 8612007-09

SCAN #	NAME	Estimated Concentration UG/KG
1093	unknown	920

Form 3-6.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP BC2-2

ANAMETRIX NO: 8612007-10

SCAN #	NAME	Estimated Concentration UG/KG
724	1,2,3,4-tetrahydronaphthalene	240
775	1,2,3,4-tetrahydro-2-methylnaphthalene	65
820	1,2,3,4-tetrahydro-6-methylnaphthalene	120
845	1,2,3,4-tetrahydro-5-methylnaphthalene	120
929	1,2,3,4-tetrahydro-6,7-dimethylnaphthalene	110

Form 3-7.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE3-10

ANAMETRIX NO: 8612007-11

SCAN #	NAME	Estimated Concentration UG/KG
939	tetradecane	510
1018	pentadecane	690
1092	heptadecane	850
1166	2,6,10,14-tetramethylheptadecane	970
1235	octadecane	640
1292	nonadecane	550
1353	eicosane	620
1412	heneicosane	680

Form 3-8.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE2-2

ANAMETRIX NO: 8612007-12

SCAN #	NAME	Estimated Concentration UG/KG
1165	2,6,10,14-tetramethylheptadecane	200
1235	octadecane	170
1292	nonadecane	150
1353	eicosane	160
1411	heneicosane	190
1521	tetracosane	160

Form 3-9.

ORGANICS ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 COMP AE2-4

ANAMETRIX NO: 8612007-14

SCAN #	NAME	Estimated Concentration UG/KG
559	1,2,3-trimethylbenzene	350
591	1,2,4-trimethylbenzene	320
671	undecane	820
767	dodecane	1600
856	tridecane	2600
939	tetradecane	2600
1017	pentadecane	1900
1126	heptadecane	1400
1166	2,6,10,14-tetramethylheptadecane	1600
1235	octadecane	1500

Form 3-10.

EMCON

ANAMETRIX

GC/MS SPECIALISTS

ENVIRONMENTAL • ANALYTICAL SERVICES

2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

12/2/1986

December 19, 1986

Work Order Number 8612001

Date Received 12/02/86

PO No. 12158

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

One soil sample was received for analysis of priority pollutants
by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)	DATE SAMPLED	DATE ANALYZED
8612001-01	365-02.04 AD4-13 0-0.5	8270	11/25/86	12/06/86

RESULTS

See enclosed data sheets, Forms 2-1a thru 2-1b.

EXTRA COMPOUNDS

See enclosed data sheet, Form 3-1..

If there is any more that we can do, please give us a call. Thank you
for using ANAMETRIX.

Sincerely,

Burt Sutherland

Burt Sutherland
Laboratory Manager

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AD4-13 0-0.5
Lab ID # : 8612001-01
Matrix : SOIL
Released : 12/16/86

Case No: NA
Tape # : NA
Rcv'd : 12/02/86
Analyst: BWS BWS

SEMIVOLATILE COMPOUNDS

CAS #		ug/kg	
62-75-9	* N-Nitrosodimethylamine	<66	U
108-95-2	* Phenol	<66	U
62-53-3	**Aniline	<66	U
111-44-4	* bis(-2-Chloroethyl)Ether	<66	U
95-57-8	* 2-Chlorophenol	<66	U
541-73-1	* 1,3-Dichlorobenzene	<66	U
106-46-7	* 1,4-Dichlorobenzene	<66	U
100-51-6	**Benzyl Alcohol	<66	U
95-50-1	* 1,2-Dichlorobenzene	<66	U
95-48-7	**2-Methylphenol	<66	U
39638-32-9	**bis(2-chloroisopropyl)Ether	<66	U
106-44-5	**4-Methylphenol	<66	U
621-64-7	* N-Nitroso-Di-n-Propylamine	<66	U
67-72-1	* Hexachloroethane	<66	U
98-95-3	* Nitrobenzene	<66	U
78-59-1	* Isophorone	<66	U
88-75-5	* 2-Nitrophenol	<66	U
105-67-9	* 2,4-Dimethylphenol	<66	U
65-85-0	**Benzoic Acid	<320	U
111-91-1	* bis(-2-Chloroethoxy)Methane	<66	U
120-83-2	* 2,4-Dichlorophenol	<66	U
120-82-1	* 1,2,4-Trichlorobenzene	<66	U
91-20-3	* Naphthalene	<66	U
106-47-8	**4-Chloroaniline	<66	U
87-68-3	* Hexachlorobutadiene	<66	U
59-50-7	* 4-Chloro-3-Methylphenol	<66	U
91-57-6	**2-Methylnaphthalene	<66	U
77-47-4	* Hexachlorocyclopentadiene	<66	U
88-06-2	* 2,4,6-Trichlorophenol	<66	U
95-95-4	**2,4,5-Trichlorophenol	<320	U
91-58-7	* 2-Chloronaphthalene	<66	U
88-74-4	**2-Nitroaniline	<320	U
131-11-3	* Dimethyl Phthalate	<66	U
208-96-8	* Acenaphthylene	<66	U
99-09-2	**3-Nitroaniline	<320	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ANAMETRIX, INC. (408) 629-1132
2754 AIELLO DRIVE, SAN JOSE, CA 95111

ORGANICS ANALYSIS DATA SHEET

Lab Name : 365-02.04 AD4-13 0-0.5
Lab ID # : 8612001-01
Matrix : SOIL
Released : 12/16/86

Case No: NA
Tape # : NA
Rcv'd : 12/02/86
Analyst: BWS *BWS*

SEMIVOLATILE COMPOUNDS			
CAS #		ug/kg	
83-32-9	* Acenaphthene	<66	U
51-28-5	* 2,4-Dinitrophenol	<320	U
100-02-7	* 4-Nitrophenol	<320	U
132-64-9	**Dibenzofuran	<66	U
121-14-2	* 2,4-Dinitrotoluene	<66	U
606-20-2	* 2,6-Dinitrotoluene	<66	U
84-66-2	* Diethylphthalate	<66	U
7005-72-3	* 4-Chlorophenyl-phenylether	<66	U
86-73-7	* Fluorene	<66	U
100-01-6	**4-Nitroaniline	<320	U
534-52-1	**4,6-Dinitro-2-Methylphenol	<320	U
86-30-6	* N-Nitrosodiphenylamine	<66	U
122-66-7	**1,2-Diphenylhydrazine	<66	U
101-55-3	* 4-Bromophenyl-phenylether	<66	U
118-74-1	* Hexachlorobenzene	<66	U
87-86-5	* Pentachlorophenol	<320	U
85-01-8	* Phenanthrene	<66	U
120-12-7	* Anthracene	<66	U
84-74-2	* Di-n-Butylphthalate	<66	U
206-44-0	* Fluoranthene	<66	U
92-87-5	* Benzidine	<320	U
129-00-0	* Pyrene	<66	U
85-68-7	* Butylbenzylphthalate	<66	U
91-94-1	* 3,3'-Dichlorobenzidine	<132	U
56-55-3	* Benzo(a)Anthracene	<66	U
117-81-7	* bis(2-Ethylhexyl)Phthalate	<66	U
218-01-9	* Chrysene	<66	U
117-84-0	* Di-n-Octyl Phthalate	<66	U
205-99-2	* Benzo(b)Fluoranthene	<66	U
207-08-9	* Benzo(k)Fluoranthene	<66	U
50-32-8	* Benzo(a)Pyrene	<66	U
193-39-5	* Indeno(1,2,3-cd)Pyrene	<66	U
53-70-3	* Dibenz(a,h)Anthracene	<66	U
191-24-2	* Benzo(g,h,i)Perylene	<66	U

Data Reporting Qualifiers

* Indicates 8270 approved compound (Federal Register 10/26/84)

** Indicates US EPA CLP Hazardous Substance List Compound (HSL)

For reporting purposes, the following qualifiers are used:

Value + : Indicates a value greater than the instrument detection limit.

U : Indicates instrument detection limit.

ORGANIC ANALYSIS DATA SHEET
Tentatively Identified Extra Compounds

CLIENT ID: 365-02.04 AD4-13 0-0.5

ANAMETRIX NO: 8612001-01

SCAN	NAME	Estimated Concentration UG/KG
1537	tetracosane	1100
1582	pentacosane	1800
1636	hexacosane	900
1701	heptacosane	1400
1751	octacosane	1500
1828	nonacosane	1100

Form 3-1.

California Analytical Laboratories

2544 Industrial Boulevard ♦ West Sacramento, CA 95691 ♦ (916) 372-1393

A DIVISION OF
ENSECO
INCORPORATED

EMCON
DEC 29 1986


December 23, 1986
Lab No. 27261
Received: 12-8-86
Project ID: 365-02.04
PO Number: 12185

Keoni Murphy
EMCON Associates
1921 Ringwood Ave.
San Jose, CA 95131

Seven soil samples were received under chain of custody in wide mouth jars and four inch brass core tubes to be analyzed for total hydrocarbons by IR (EPA 418.1).

RESULTS

<u>CAL I.D.</u>	<u>Sample I.D.</u>	<u>mg/Kg (ppm)</u> <u>Total hydrocarbons</u>
27261-1	AE4-10-2.5-3 11-18-86	66
-2	COMP-AD4-26	200
-3	COMP-AD4-27	890
-4	COMP-AE4-12	190
-5	COMP-AE3-09	280
-6	BB2-11-0.5-1	16000
-7	AD4-13-1-1.5 11-20-86	1300


Ben N. Buechler
Director of
Chromatography Services

mbw

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Analysis • Consultation • Research • Environmental Studies

State Approved Water Laboratory



CERTIFIED ANALYTICAL REPORT

Report to: Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	CMP-AD4-24	CMP-AD4-8	CMP-AD4-9	CMP-AD4-12
Field Date:	11/21/86	11/21/86	11/21/86	11/21/86
Laboratory Number:	E86-1101	E86-1101	E86-1101	E86-1101

Chromium, Total	200	280	170	150
Copper, Total	39	34	65	56
Lead, Total	14	21	22	43
Nickel, Total	430	1100	520	390
Zinc, Total	46	33	58	110

Sample Designation:	CMP-AD4-7	CMP-AD4-6	CMP-AD4-23	CMP-AD4-5
Field Date:	11/21/86	11/21/86	11/21/86	11/21/86
Laboratory Number:	E86-1101	E86-1101	E86-1101	E86-1101

Chromium, Total	73	160	490	170
Copper, Total	42	17	22	250
Lead, Total	15	15	22	95
Nickel, Total	160	1000	980	550
Zinc, Total	56	21	31	190

Sample Designation:	CMP-AD4-1
Field Date:	11/21/86
Laboratory Number:	E86-1101

Chromium, Total	130
Copper, Total	1000
Lead, Total	82
Nickel, Total	240
Zinc, Total	370

Page 1 of 2

Reported by:

Keem A. Murphy

Date:

Jun 5, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

DATE: 12/30/86

Project Number: 365-02.0-

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Analysis • Consultation • Research • Environmental Studies

State Approved Water Laboratory

CERTIFIED ANALYTICAL REPORT



Report to: Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL

Units: mg/kg

Sample Designation:	AD4-2	AD4-26	AD4-27	AE4-12
Field Date:	11/24/86	11/24/86	11/24/86	11/24/86
Laboratory Number:	E86-1100	E86-1100	E86-1100	E86-1100

Chromium, Total	330	48	74	140
Copper, Total	24	2300	98	4000
Lead, Total	15	210	72	4700
Nickel, Total	1100	33	160	510
Zinc, Total	33	1200	170	3800

Sample Designation:	AE3-9	AC4-1	AD4-25	AD4-4
Field Date:	11/24/86	11/24/86	11/24/86	11/24/86
Laboratory Number:	E86-1100	E86-1100	E86-1100	E86-1100

Chromium, Total	76	350	170	170
Copper, Total	27	170	39	22
Lead, Total	14	770	12	15
Nickel, Total	110	73	390	1000
Zinc, Total	55	110	46	25

Sample Designation:	AD4-3
Field Date:	11/24/86
Laboratory Number:	E86-1100

Chromium, Total	400
Copper, Total	13
Lead, Total	14
Nickel, Total	1100
Zinc, Total	22

Page 1 of 2

Reported by:

William A. Murphy

Date:

Dec 30, 1986

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

DATE: 12/30/86

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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State Approved Water Laboratory



CERTIFIED ANALYTICAL REPORT

Report to:

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	CMP-AE4-1	CMP-AD4-16	CMP-AD4-15	CMP-AD4-10
Field Date:	11/20/86	11/20/86	11/20/86	11/20/86
Laboratory Number:	E86-1084	E86-1084	E86-1084	E86-1084
Chromium, Total	160	200	300	380
Copper, Total	41	24	31	25
Lead, Total	13	15	18	19
Nickel, Total	470	590	530	830
Zinc, Total	36	36	47	41

Sample Designation:	CMP-AD4-11	CMP-AD4-17	CMP-AD4-18	CMP-AD4-13
Field Date:	11/20/86	11/20/86	11/20/86	11/20/86
Laboratory Number:	E86-1084	E86-1084	E86-1084	E86-1084
Chromium, Total	290	150	97	170
Copper, Total	9.6	170	68	68
Lead, Total	15	66	22	55
Nickel, Total	1200	480	260	400
Zinc, Total	13	270	65	98

Sample Designation:	CMP-AD4-14	CMP-AD4-19
Field Date:	11/20/86	11/20/86
Laboratory Number:	E86-1084	E86-1084
Chromium, Total	160	110
Copper, Total	53	39
Lead, Total	42	16
Nickel, Total	300	260
Zinc, Total	110	46

Page 1 of 2

Reported by:

Koehn Murphy

Date:

JUN 5, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

DATE: 12/30/86

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

EMCON ASSOCIATES • CHEMICAL LABORATORIES

Analysis • Consultation • Research • Environmental Studies
State Approved Water Laboratory



CERTIFIED ANALYTICAL REPORT

Project Number: 365-02.04

Report to: Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	CMP-AD4-21	CMP-AD4-20	CMP-AD4-22	CMP-AE4-5
Field Date:	11/19/86	11/19/86	11/19/86	11/19/86
Laboratory Number:	E86-1077	E86-1077	E86-1077	E86-1077

Chromium, Total	150	180	150	130
Copper, Total	30	65	48	90
Lead, Total	18	31	17	45
Nickel, Total	560	610	280	200
Zinc, Total	39	82	53	160

Sample Designation:	CMP-AE4-8	CMP-AE4-7	CMP-AE4-6	CMP-AE4-3
Field Date:	11/19/86	11/19/86	11/19/86	11/19/86
Laboratory Number:	E86-1077	E86-1077	E86-1077	E86-1077

Chromium, Total	440	170	440	240
Copper, Total	26	200	12	6.4
Lead, Total	19	84	20	18
Nickel, Total	1200	450	1400	1300
Zinc, Total	30	140	19	13

Sample Designation:	CMP-AE4-2
Field Date:	11/19/86
Laboratory Number:	E86-1077

Chromium, Total	300
Copper, Total	6.6
Lead, Total	14
Nickel, Total	1300
Zinc, Total	15

Page 1 of 2

Reported by:

Keen A. Murray

Date:

Jan 5, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

DATE: 12/30/86

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Report to:

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	AD4-24	AD4-8	AD4-9	AD4-12
Field Date:	11/21/86	11/21/86	11/21/86	11/21/86
Laboratory Number:	E86-1101	E86-1101	E86-1101	E86-1101

Chromium, Total	200	280	170	150
Copper, Total	39	34	65	56
Lead, Total	14	21	22	43
Nickel, Total	430	1100	520	390
Zinc, Total	46	33	58	110

Sample Designation:	AD4-7	AD4-6	AD4-23	AD4-5
Field Date:	11/21/86	11/21/86	11/21/86	11/21/86
Laboratory Number:	E86-1101	E86-1101	E86-1101	E86-1101

Chromium, Total	73	160	490	170
Copper, Total	42	17	22	250
Lead, Total	15	15	22	95
Nickel, Total	160	1000	980	550
Zinc, Total	56	21	31	190

Sample Designation:	AD4-1
Field Date:	11/21/86
Laboratory Number:	E86-1101

Chromium, Total	130
Copper, Total	1000
Lead, Total	82
Nickel, Total	240
Zinc, Total	370

Page 1 of 2

Reported by:

Kenneth Murphy

Date:

Dec 31, 1986

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

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DATE: 12/30/86

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

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Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Report to:

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL

Units: mg/kg

Sample Designation:	CMP-AE3-10	CMP-AE2-2	CMP-AE2-3	CMP-AE2-4
Field Date:	12/03/86	12/03/86	12/03/86	12/03/86
Laboratory Number:	E86-1122	E86-1122	E86-1122	E86-1122

Chromium, Total	100	85	51	96
Copper, Total	66	42	25	22
Lead, Total	12	87	16	14
Nickel, Total	68	120	65	500
Zinc, Total	62	72	55	41

Sample Designation:	CMP-AD2-1	CMP-AE2-1
Field Date:	12/03/86	12/03/86
Laboratory Number:	E86-1122	E86-1122

Chromium, Total	37	60
Copper, Total	670	58
Lead, Total	110	17
Nickel, Total	36	52
Zinc, Total	950	57

Page 1 of 2

Reported by:

Kenn A. Murphy

Date:

Jan 5, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

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DATE: 12/30/86

Project Number: 365-02.0

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Report to:

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	AE3-10	AE2-2	AE2-3	AE2-4
Field Date:	12/03/86	12/03/86	12/03/86	12/03/86
Laboratory Number:	E86-1122	E86-1122	E86-1122	E86-1122
Chromium, Total	100	85	51	96
Copper, Total	66	42	25	22
Lead, Total	12	87	16	14
Nickel, Total	68	120	65	500
Zinc, Total	62	72	55	41

Sample Designation:	AD2-1	AE2-1
Field Date:	12/03/86	12/03/86
Laboratory Number:	E86-1122	E86-1122
Chromium, Total	37	60
Copper, Total	670	58
Lead, Total	110	17
Nickel, Total	36	52
Zinc, Total	950	57

Page 1 of 2

Reported by: Kevin A. Murphy Date: Dec 31, 1986

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

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Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	CMP-AE3-3	CMP-AF4-1	CMP-AE3-4	CMP-AE3-1
Field Date:	11/18/86	11/18/86	11/18/86	11/18/86
Laboratory Number:	E86-1071	E86-1071	E86-1071	E86-1071

Chromium, Total	25	25	50	100
Copper, Total	23	51	18	21
Lead, Total	7.3	6.5	14	18
Nickel, Total	56	18	88	190
Zinc, Total	21	39	45	39

Sample Designation:	CMP-AE4-11	CMP-AE4-10	CMP-AE4-9	CMP-AE4-4
Field Date:	11/18/86	11/18/86	11/18/86	11/18/86
Laboratory Number:	E86-1071	E86-1071	E86-1071	E86-1071

Chromium, Total	78	110	360	120
Copper, Total	43	40	120	33
Lead, Total	27	36	51	15
Nickel, Total	180	330	980	320
Zinc, Total	61	53	61	38

Page 1 of 2

Reported by:

KEVIN AMUNDY

Date:

JUN 5, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

DATE: 12/30/86

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Report to: Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Project Number: 365-02.04

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	CMP-AF3-1	CMP-AF3-2	CMP-AF3-3	CMP-AE3-8
Field Date:	11/12/86	11/12/86	11/12/86	11/12/86
Laboratory Number:	E86-1068	E86-1068	E86-1068	E86-1068

Chromium, Total	100	130	46	94
Copper, Total	42	28	31	25
Lead, Total	86	13	33	9.4
Nickel, Total	310	350	80	190
Zinc, Total	47	39	57	34

Sample Designation:	CMP-AE3-2	CMP-AE3-7	CMP-AE3-6	CMP-AE3-5
Field Date:	11/12/86	11/17/86	11/17/86	11/17/86
Laboratory Number:	E86-1068	E86-1068	E86-1068	E86-1068

Chromium, Total	89	100	27	87
Copper, Total	31	56	33	34
Lead, Total	10	13	6.6	5.6
Nickel, Total	220	140	25	200
Zinc, Total	36	180	38	41

Page 1 of 2

Reported by: Keen Murphy Date: Jun 5, 1987

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DATE: 12/30/86

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Report to:

Project Number: 365-02.04

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	AF3-1	AF3-2	AF3-3	AE3-8
Field Date:	11/12/86	11/12/86	11/12/86	11/12/86
Laboratory Number:	E86-1068	E86-1068	E86-1068	E86-1068

Chromium, Total	100	130	46	94
Copper, Total	42	28	31	25
Lead, Total	86	13	33	9.4
Nickel, Total	310	350	80	190
Zinc, Total	47	39	57	34

Sample Designation:	AE3-2	AE3-7	AE3-6	AE3-5
Field Date:	11/12/86	11/17/86	11/17/86	11/17/86
Laboratory Number:	E86-1068	E86-1068	E86-1068	E86-1068

Chromium, Total	89	100	27	87
Copper, Total	31	56	33	34
Lead, Total	10	13	6.6	5.6
Nickel, Total	220	140	25	200
Zinc, Total	36	180	38	41

Page 1 of 2

Reported by:

Kevin H. Murphy

Date:

Dec 31, 1986

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131

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METHODS OF ANALYSIS

=====

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050

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Project Number: 365-02.04

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Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	CMP-BG3-1	CMP-BF3-9	CMP-BF2-2	CMP-BE3-6
Field Date:	12/01/86	12/01/86	12/01/86	12/01/86
Laboratory Number:	E86-1118	E86-1118	E86-1118	E86-1118

Chromium, Total	14	51	78	89
Copper, Total	5.5	29	44	54
Lead, Total	4.3	11	12	19
Nickel, Total	25	41	73	76
Zinc, Total	15	35	38	49

Sample Designation:	CMP-BB2-2	CMP-BB2-7	CMP-BB2-11	CMP-BB2-8
Field Date:	12/02/86	12/02/86	12/02/86	12/02/86
Laboratory Number:	E86-1119	E86-1119	E86-1119	E86-1119

Chromium, Total	60	130	650	97
Copper, Total	42	34	380	49
Lead, Total	16	50	210	65
Nickel, Total	470	320	180	200
Zinc, Total	51	57	1800	82

Sample Designation:	CMP-BB3-1	CMP-BC2-2
Field Date:	12/02/86	12/03/86
Laboratory Number:	E86-1119	E86-1122

Chromium, Total	390	460
Copper, Total	22	37
Lead, Total	19	19
Nickel, Total	1300	870
Zinc, Total	19	59

Page 1 of 2

Reported by: *Keen A. Murphy*

Date: *Jun 5, 1987*

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Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

Sample Type: SOIL

PARAMETER -----	METHOD -----
Chromium, Total	7197
Copper, Total	7210
Lead, Total	7420
Nickel, Total	7520
Zinc, Total	7950
Acid Digestion	3050